

THE SMALL HOME



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MAY 1929

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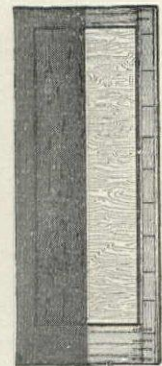
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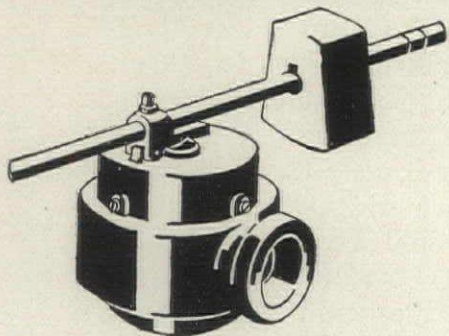
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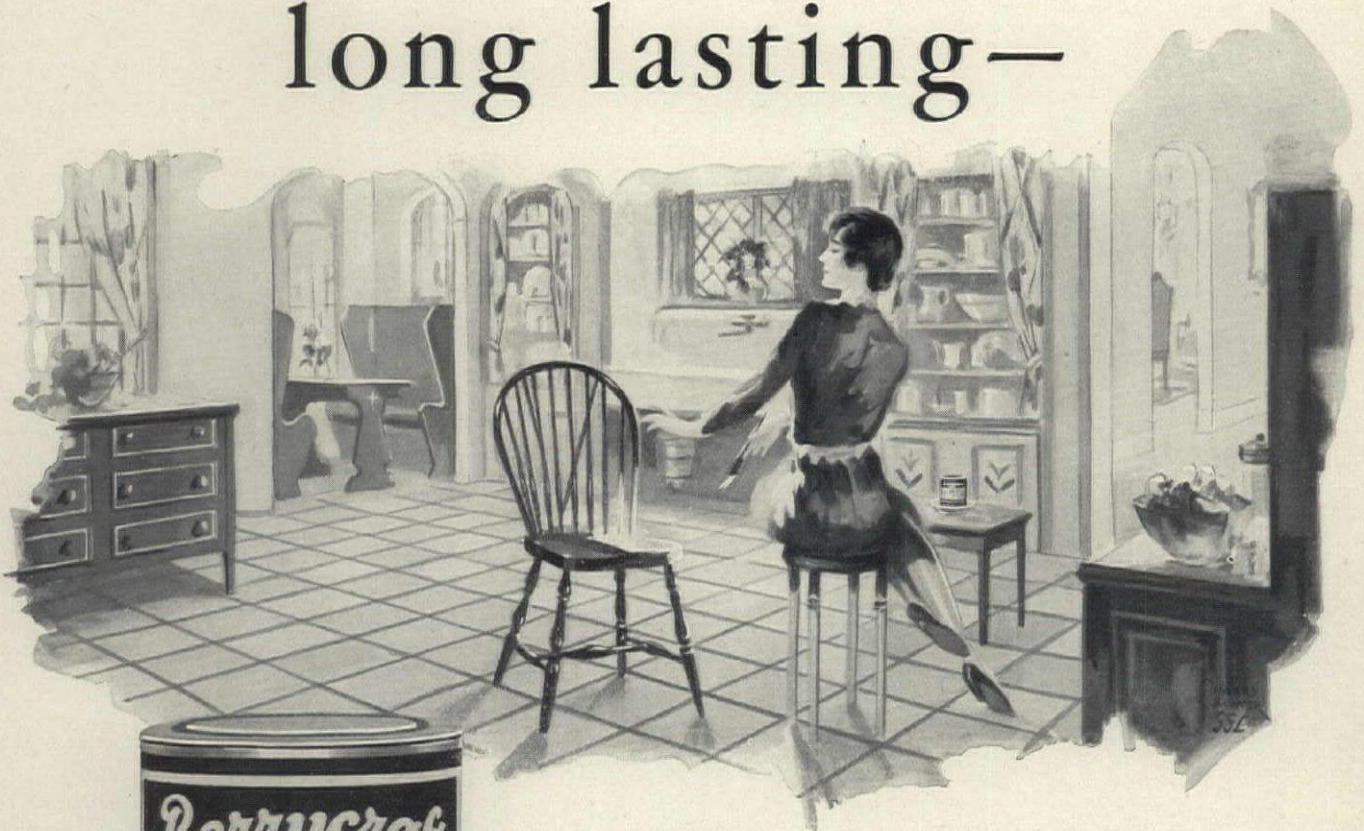
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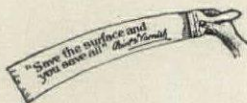


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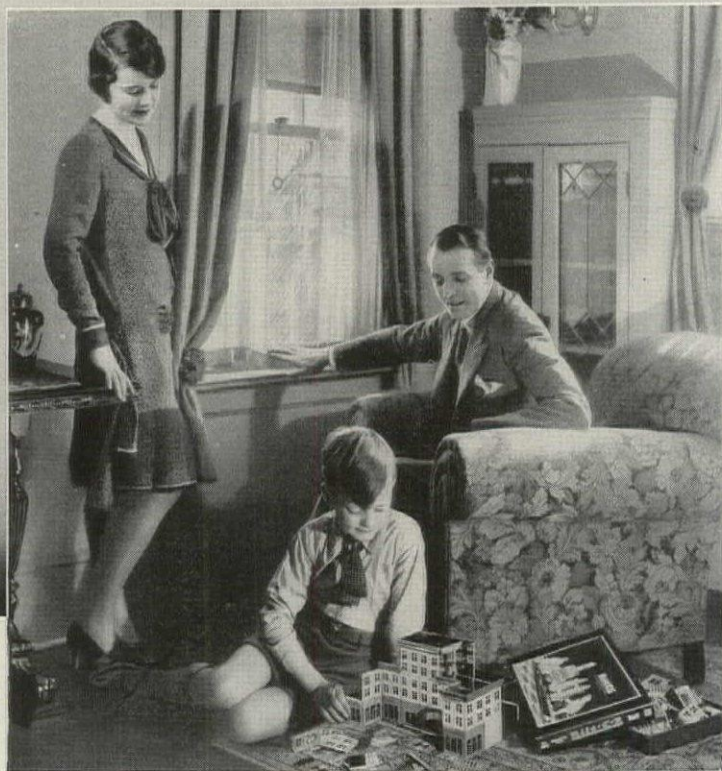
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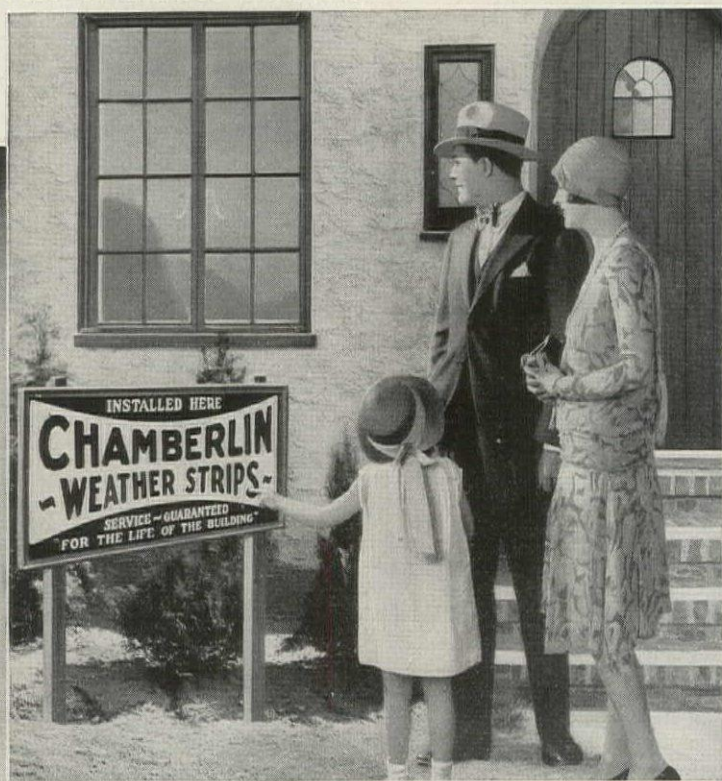
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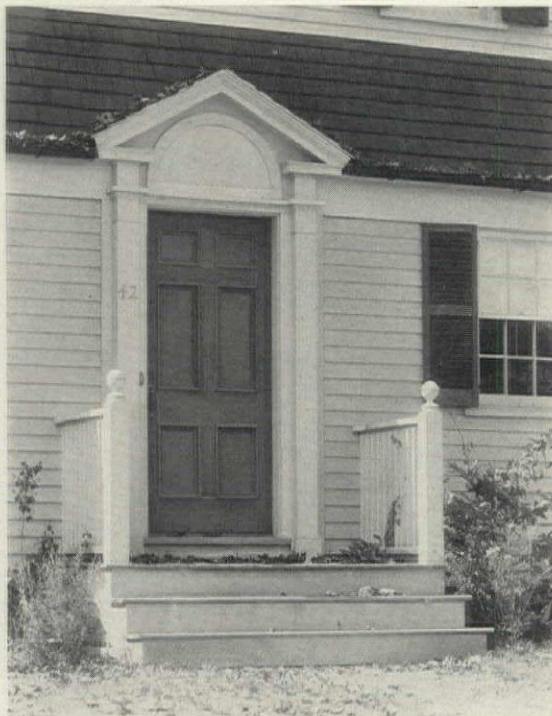
THE SMALL HOME

FINANCING • PLANNING • BUILDING

ROBERT T. JONES, A. I. A., EDITOR

THE perennial border is an open book to most gardeners. The bulb garden and the rock garden are rapidly becoming so. How many of us, however, know how to plant, what to plant, where to plant, when it comes to the question of trees for our home grounds? How many of us realize there are other things to plant them for besides shade? That certain trees are to be planted for their shape, for their texture, even for their color? That a small house may be made to give the impression of greater size, or be made to snuggle down into the landscape according to the type and growth of the trees about it?

Mr. Carhart writes on the subject of trees in relation to the house for the June issue. "Trees on the small home grounds," he says, "are perhaps the most mishandled of all the plant materials." After reading his article we predict you will be impressed with the desirability of finding the right trees for



the right place, also that you will know a great deal more about how to decide what is the right tree.

Then for the inside of the house. Miss Amsdell continues her series on furniture, in June on the subject of upholstered furniture. Those soft, comfortable chairs and davenports fill a place in our heart that no richly bedecorated period affair, no hard, unyielding Colonial piece can usurp. Considering their almost universal use—and misuse—it seems quite appropriate that they should have a chapter entirely to themselves, for there is really a great deal of ignorance on the subject of

upholstered furniture.

These are by no means all of the good things in store for June, but our space grows limited. Suffice it to say that there will be house designs also, a half dozen or more of them, and one more delightful than the other.

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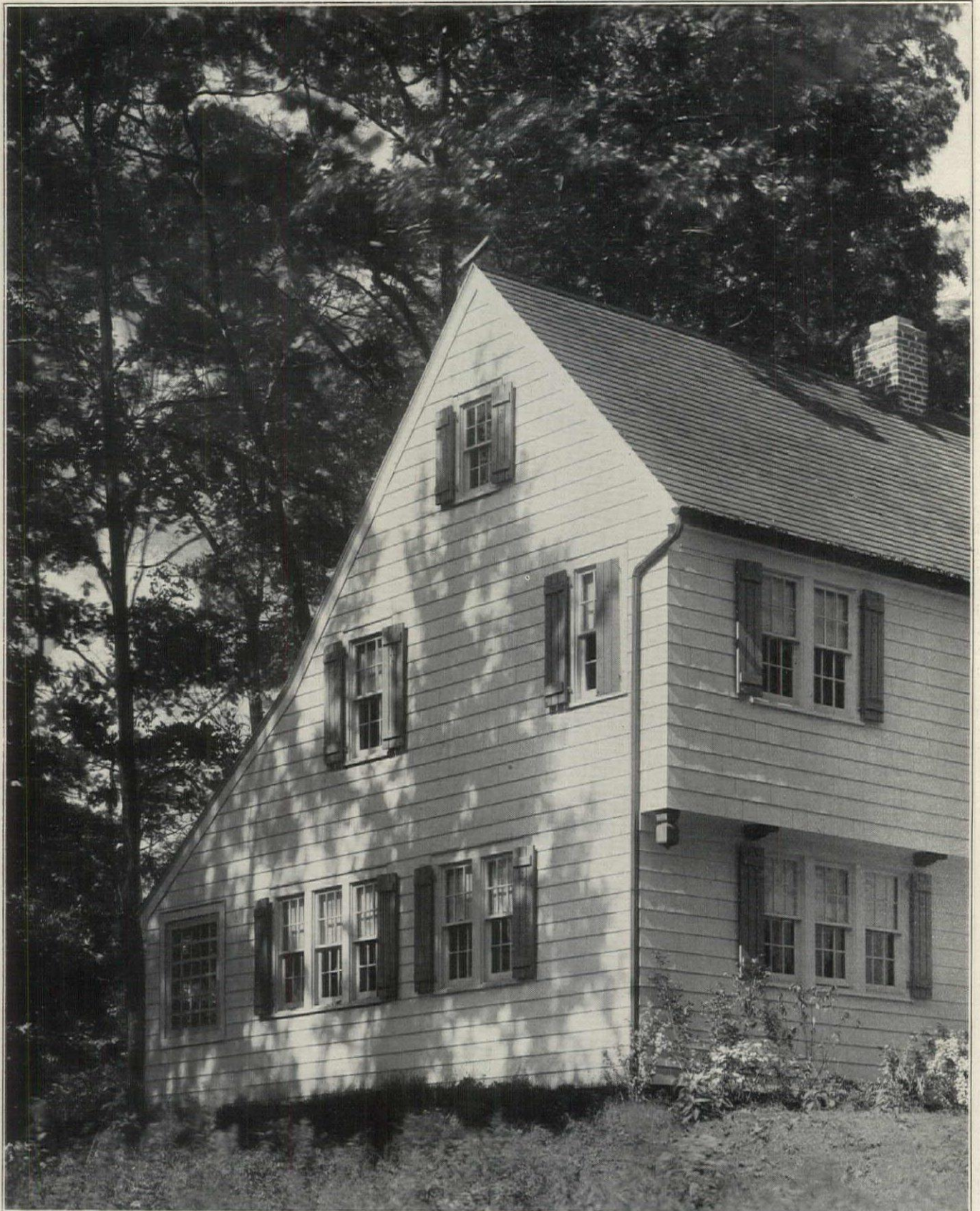
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DESIGN 6-F-7

The quaintness and virility of this type of early American house makes it a worthy precedent for the modern home. The house on page 9 with its narrow siding and diamond paned casements follows very closely the

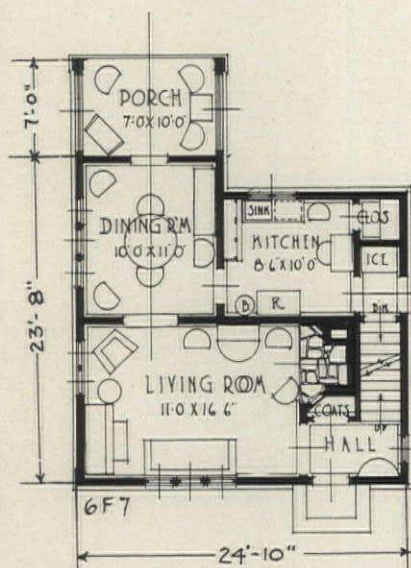
original drawings. The owner of the house shown on this page, using the same drawings, has produced equally charming results by the substitution of wide siding and double hung windows with shutters.



DESIGN 6-F-7

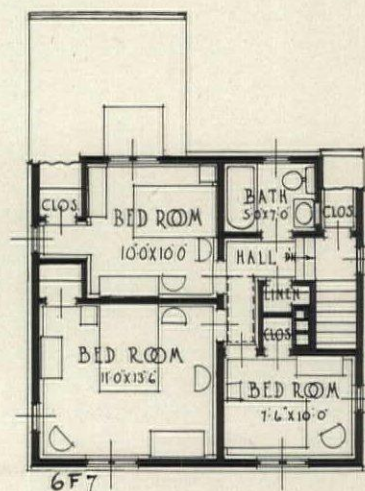
BROADCASTED FROM NEW ENGLAND

*Reminiscent of the "Salt-Box" House, an Attractive
Style for Almost Any Section*



THE style of this house may well be termed early American, since dwellings of a similar type were in evidence even before the Colonial style was developed. The overhanging second story has the same ornamental moulded drops beneath, the same diamond paned windows. Although there is a very up-to-date sun porch at the rear, the roof extends down in the same long, low sweep that covered the old time lean-to.

On the interior, perhaps the single acknowledgment made to that early period lies in the importance of the fire-place. As the furniture is indicated on the plans, one obtains a splendid idea



of the comfortable size of the rooms and the fine wall spaces allowed.



The chest of drawers, strictly modern in design, might take its place anywhere among good furniture. The small table and chair are not so successful.

OUR HERITAGE OF FURNITURE

Third Period—The Modern Note

By MEHETABEL THANKFUL AMSDELL

JUST when most of us had begun to settle down comfortably to the idea that in the world of furnishing and decoration there was very little that was new or that could be new, here this year of 1929 we find ourselves quite upset and disturbed by much talk and many evidences of what for a better term is known as "modern" or "modernistic" furniture and furnishing.

At first the really conservative minded of us were able to ignore it all in a haughty and dignified manner, but the lusty infant can no longer be so treated, so the best thing to do is to take a good look at it and try to discover if perhaps there may after all be something to the idea.

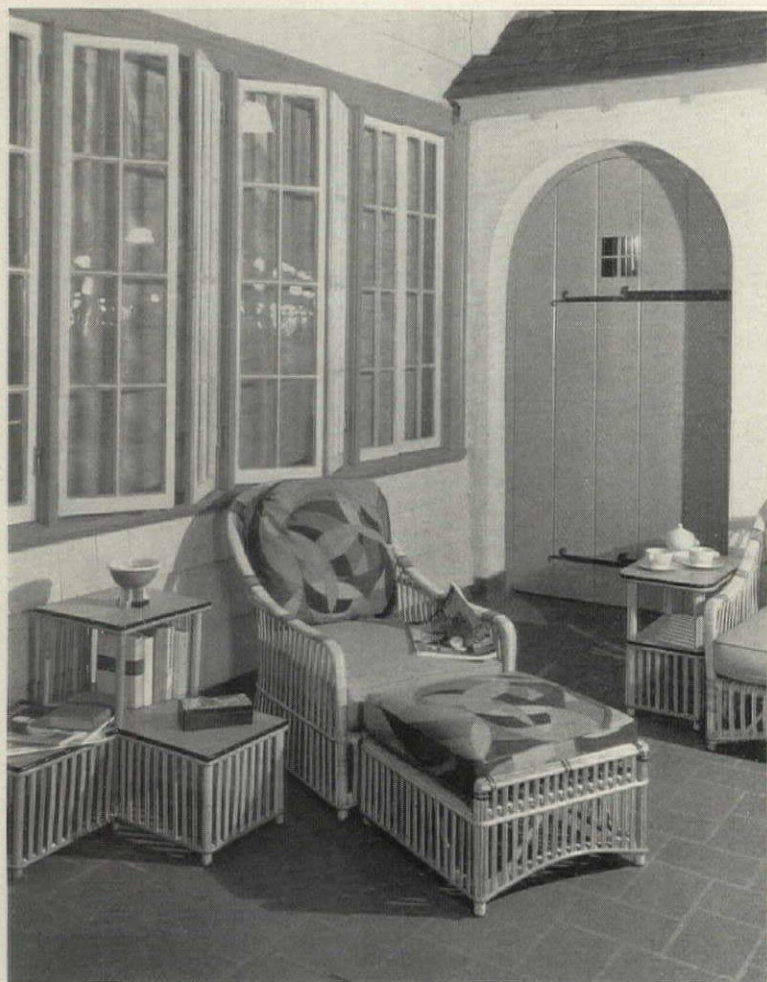
To do this we will need to take a look at ourselves in perspective. If we do so honestly we will discover that it has been over a hundred years since there has been any fresh creative thought in the world of decoration and furnishing. Just about 1800 the clock began to run down, and ever since that time we have been using warmed over ideas.

We might think of ourselves as having at our command a vast pantry filled with the riches of the past,—English, French, Italian, Spanish, American, or Chinese. For years and years we have been drawing on the limitless riches of this pantry, but have been putting precious little into it. For that reason it has seemed to some of us at times at least a little threadbare and meaningless. For when all is said and done this is the twentieth century and there must be certain things about our life and times that would soon deserve a place on the pantry shelves.

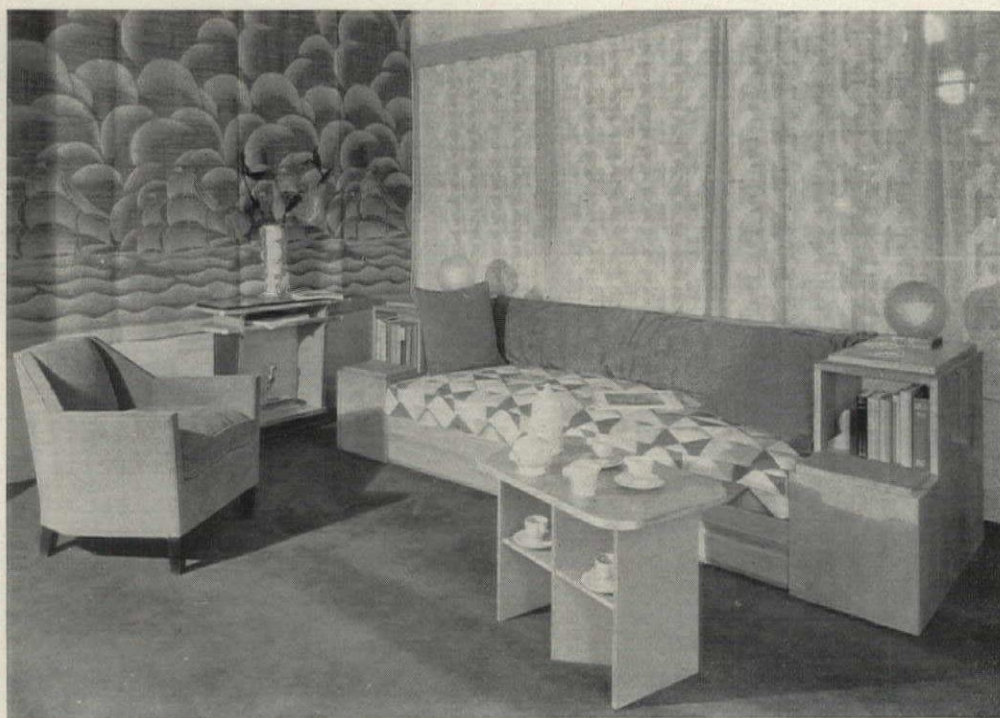
With all possible respect and admiration for the beautiful things that the past has offered us I find it thrilling to be keeping in touch with the live developments of the very times that we are a part of. This does not mean that we necessarily approve of everything that is done, but we can at least try to select



There is reasonable doubt whether some of the pieces of furniture in this modern living room will stand the test of time. The bookcase is definitely a trick piece. The low piece in front of the fireplace is neither table nor stand, and its mirror top will reflect the least spot of dust. The mantel treatment though is interesting and effective.



The sunroom offers a perfect setting for modern treatment, for it is distinctly a twentieth century idea itself. The stick willow furniture follows modern lines in an interesting way.



The davenport illustrates perfectly the modern sense of the architectural quality of furniture. Cabinets or tables usually set at the ends are here incorporated in the framework itself. We must admit there is something interesting and satisfying about such an arrangement. The novel tea table in front from a practical standpoint has something in its favor.

the things that do mean something. The movement known as modern is about thirty-five years old. It began in Vienna and later was encouraged in Paris. About 1900 we got an echo of it in our fashion of "mission" furniture. One of the ideas of modern decoration is that as nearly as we can we should get back to the beginnings of simple form, straight lines, structural honesty, and absence of meaningless ornament.

With us it was a good dash of cold water after the ugly, tiresome black walnut and golden oak abominations we had been living with. Then after our little flair for mission we reached back onto the pantry shelves again and for the last twenty years have not been trying in any way to make things that were really our own at all, and most of us yet are living with warmed over furnishings.

This does not mean that I disapprove of using the beauty that the past has bequeathed us. Far from it. All I am asking is that we do not fall into the habit of thinking that the world is entirely finished and done, and sit with hands folded. Every day that we live the world is growing and moving on, and if we are alive we are growing with it and anxious to keep up with all that is happening. There are certain styles of the past that we need today and will always use. There are others so foreign to our ways of today that to use them is a weak falsehood.

For instance, the rich heavy carvings of early Gothic furniture are out of place in almost any home today. There is nothing in our lives that finds expression in such decoration. Our methods of manufacture are so costly that to have the real is prohibitively expensive and cheap commercial reproductions with machine carving thinned down are an utter abomination. Our lives and homes today also are not in harmony with the elegance

and grandeur of French furniture. The life that produced their styles is utterly unlike ours of this time and place, and not to recognize this difference is to be insensitive to the meanings and significance of beauty. The simplicity and charm of early America, the refined and delicate mahogany of the Colonial type are thoroughly in keeping with our homes today. The richness and dignity of Italian Renaissance furniture cannot be expressed in inexpensive reproductions, and to try is to do dishonor to a style that is all that is fine and noble. So always it gets back to a question of suitability.

When men are back at a beginning in building and furnishing they think of furniture as a structural part of the building itself. Early furniture always has a strong structural feeling, and much of it will actually be built into the room. English furniture of early times was

built in this way, but as time went on this architectural sense weakened, until by the 18th century furniture was quite separate from architecture. In the best of the modern work of today we have returned to the old architectural idea. A davenport frame may be fastened to the wall, and the ends fashioned into tables with shelves that are of course permanent features of the design. All sorts of ingenious cupboards and shelf arrangements are worked out.

The modern office gives a perfect setting for the new idea. Also the sunroom is the one room in the house that may be truly modern for it is a contribution of the life of today. Here we may fashion the modern interpretation; bright colors, large window spaces, conveniently arranged furniture, wall spaces broken into interesting shelf arrangements. The possibilities are limitless.

For the decorative background the wall paper manufacturers are turning out papers of amazingly fresh and stimulating designs. In the entire treatment of walls and woodwork the modern movement is most interesting. For so long we have been going to the same pantry shelves for our wall finishes, or else leaving them entirely bare of any architectural quality, that it is quite refreshing to find something new and interesting for our consideration. However, just to be new and interesting is not the idea, but to be good at the same time. Many of the new wall treatments are splendid.

In the matter of fireplace design also the modern designers have given us some fresh and arresting treatments, a most welcome change after our rather limited treatment of this feature of a room. The very beginning of good decoration is a distinctive treatment of walls and woodwork, and any movement that begins there is started right. In many of the modern rooms fabrics are used again on the walls, wood and paper, or wood and fabrics are combined. Then many of the designers are using



A charming and graceful arrangement that is distinctly modern from the paper to the furniture. Pieces like these would fit into many a family living room.

the fabrics that are finished with a strictly washable surface, for to be practical and serviceable is one of the basic ideas of good modern decoration. Moldings are reduced to the simplest terms, and surprisingly interesting effects worked out from them. The ceiling is again being accorded the dignity of decorative importance and receiving some attention.

In all the realm of modern decorative art there is perhaps nothing so new as electricity, and in the matter of lighting we have a whole new field before us. It would take an article all its own to tell about the developments in modern lighting. In the world of furniture there have already appeared a great many pieces that may take their place as really good design. And there are many others that are frankly experimental and freakish. A growing and changing time like this is a bit expensive, because it costs money to make experiments. Also

turned out yet at any rate in quantity at low cost.

There is all the difference in the world in being cheap and being inexpensive. The cheap thing in the end is frightfully expensive, and cheap modern furniture might well prove to be a most costly experiment. So again it gets back to our individual sense of discrimination and judgment, a regular text with me as you know by this time. The cost should tell us something of what we might expect, and if it is too inexpensive a safe rule to guide us would be that we couldn't afford to buy such a cheap piece. There is nothing in the world that looks so cheap as a piece that is trying to be something that it is not and cannot be.

Next for our consideration should be the matter of design. The last furniture that had any decorative background is Empire, made from about 1800 to

(Continued on page 36)

as yet most of the best work is a special order proposition, specially designed for a certain room. This is of course necessary from the very nature of the work. Many pieces are making their way into the general shops, however, but unless we have something to guide us, we are going to add only more confusion and disharmony to our homes.

Most modern furniture depends for its excellence on the quality of the woods used, the workmanship, and the finish. A special emphasis is placed on the natural appearance of woods, and every effort made to preserve the fine natural beauties of good woods. This is an expensive process. In the manufacture of furniture the finishing of a good piece often costs as much as the material and the making. Unless one were used to the work involved in the making of furniture it is hard to believe this perhaps, but with good furniture the ratio of cost between making and finishing is often 50-50. This means that good modern pieces cannot very well be

This dry wall has been built the maximum height of 4½' and as a retaining wall. A slight batter or backward pitch was provided as a precaution against heaving. The stone used is sandstone taken from the foundation walls of an old cellar nearby.



This photograph was taken before planting of the wall and bank. The owner has since planted Matrimony Vine and Fortune Forsythia to droop over a part of the wall. Many of the rock plants listed with this article were used in the crevices between the stones.

Nichols, Nason & Cornell, Landscape Architects

RUGGEDNESS AND BEAUTY IN STONE WALLS

An Inexpensive Means of Enhancing the Small Lot

By HARVEY H. CORNELL

Member American Society of Landscape Architects

STONE walls and flowering plants have always been good neighbors. This happy companionship means much to the garden builder. The stone wall is by far the sturdier of the pair. It affords protection from the elements as a partial shelter, radiating warmth and providing moisture to the soil closely adjacent. As a retaining wall it holds the soil where sharp differences in elevation occur and thereby allows the proper adjustment of grades for the best garden construction.

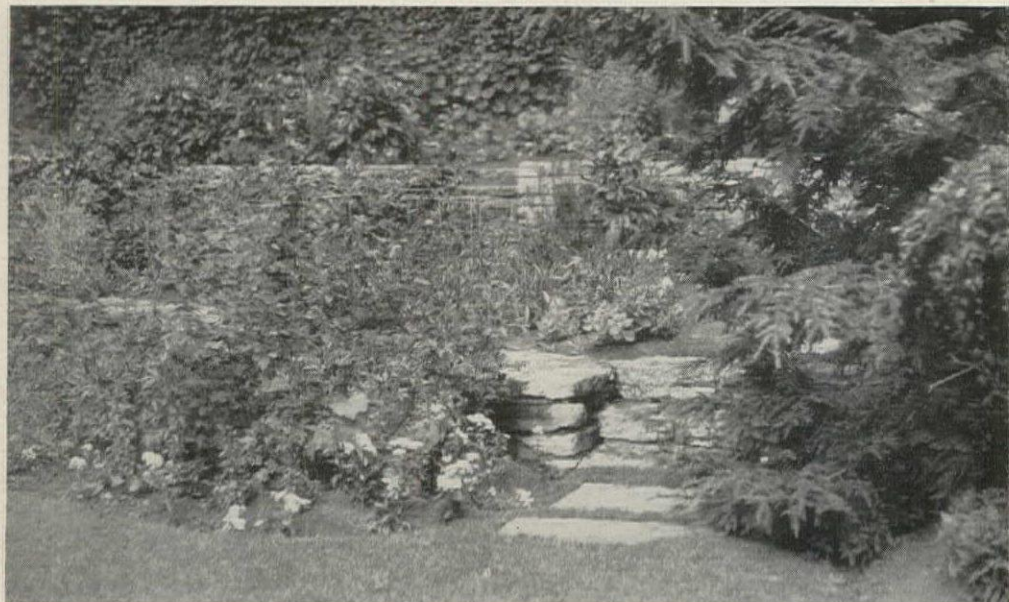
A stone wall is an indispensable feature within the flower garden if only from a practical standpoint. The type of stone wall best adapted to gardens and especially popular because of low initial cost and ease of construction is that built of the natural or quarry-run stone where no cutting or close fitting is necessary. Naturally some chipping,

splitting, and rough fitting must be done, but the skilled workmanship of the stone mason is for the most part unnecessary, and very fine results can be obtained by the amateur.

Methods of construction are of the simplest. In the majority of cases such walls are "dry," that is, free from the use of mortar as a binding material. The rough, irregular character of the wall will allow considerable heaving by frost without serious damage to both construction and appearance, and therefore a stone or concrete footing built below frost line may be omitted. Where soil is composed principally of heavy clay it is well to place the stone upon 6" of cinders or gravel. But ordinarily a dry stone wall is constructed from 6" to 1' below the natural ground level, first tamping the soil firmly before placing the stones. Such

a wall may be as high as 4' even when used as a retaining wall, providing it is at least 18" wide. Where the weight of the soil retained is too great, a slight batter is advisable, that is a slight backward tilt to the wall, so that the weight of the stone will act as a balance to the weight of the soil.

Many kinds of stone are available for walls within the class under consideration. Certain localities naturally are rich in varied quarry deposits, and there is a natural tendency to use native stone as far as possible. Limestone is used as much if not more than any other kind of stone because it is often found in stratified layers comparatively thin, easily quarried, and easily handled. That which is too soft for ordinary building material may be used in dry wall construction. Other limestones are tough and durable, some

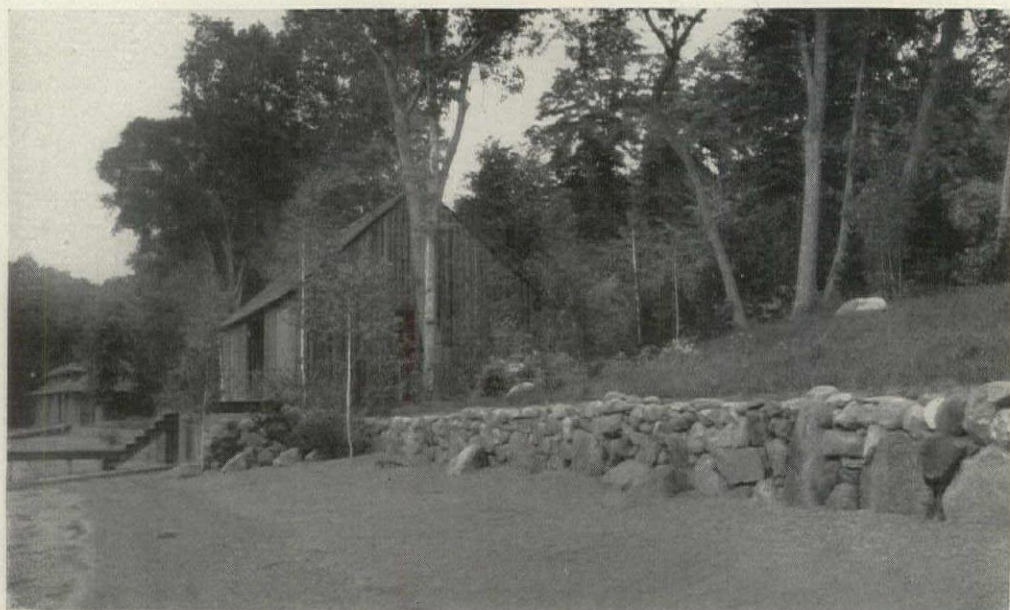


Nichols, Nason & Cornell, Landscape Architects

The steps and walls made possible the development of three different levels in this little garden. Stonecrops, Pinks, and Balloon Flowers were used to enframe the opposite side, and Hybrid Tea Roses were planted along the base of the lower wall, the wall providing warmth and protection.



In the same garden as above but with Peonies much in evidence, also the Regal and Speciosum Lilies. The stepping stones in the foreground are of Vermont slate, while the walls and steps are of quarry run limestone.



A carefully built wall of split boulders, which provides a retaining wall along the beach. The irregular haphazard method of laying the stones has given an aged and permanent appearance to the wall which blends completely into the natural surroundings.

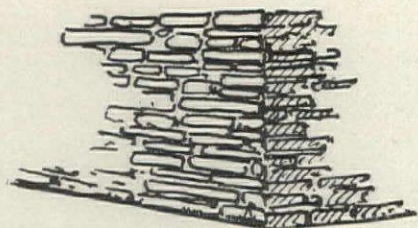


ILLUSTRATION 1

Illustration 1 indicates a quarried limestone of very thin slab, interesting as a type, and always giving a solid substantial appearance.

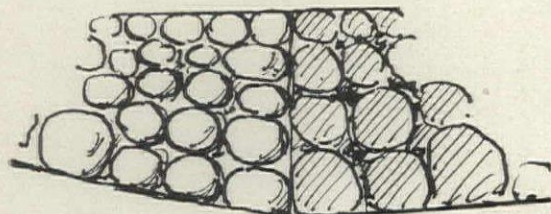


ILLUSTRATION 2

Illustration 2 is a wall of round smooth field stones, often called cobblestones. Not a desirable type but often used because of ease in handling. Such a wall loses the horizontal lines so desirable in good construction.

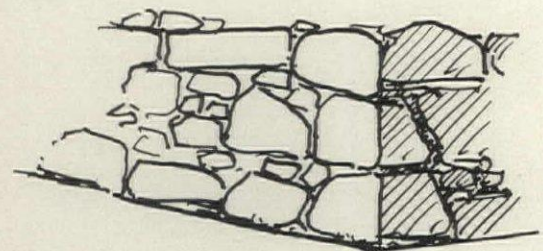


ILLUSTRATION 3

Illustration 3 indicates a wall of hardstone, commonly called trap-rock, where extreme, yet interesting, irregularity of fitting is due to difficulty in handling and splitting.

Illustration 4 is a wall of split faced boulders, the wide spaces filled with mortar flush with the surface of the boulders.

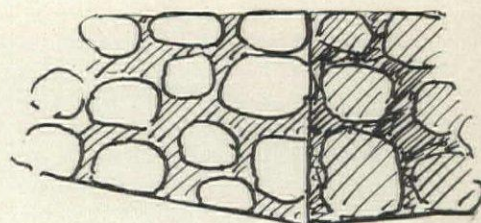


ILLUSTRATION 4

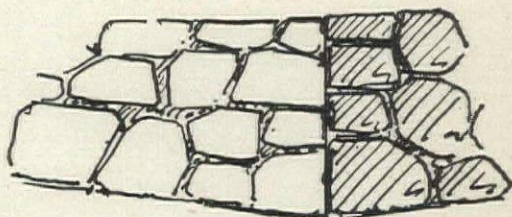


ILLUSTRATION 5



ILLUSTRATION 6

Illustration 5 represents the use of comparatively thin pieces of stone, placed vertically with faces out. Such a wall will seldom give the desired appearance of solidity, but is often resorted to in order to save stone. Mortar joints of course are necessary.

deposits being extremely hard, indicating an edge rounded through weathering instead of chipping. Various sandstones are available for similar use, some most interesting in color, and there is still another limestone, irregularly weathered, showing intricate forms and colorations, often thoroughly pitted and covered with lichens and moss. In fact, in many localities within reasonable distances, interesting quarry deposits can be found for a variety of uses in wall construction.

Field stones are often used. The important consideration in the use of field stones is scale. So often very small stones destroy the desirable and usually prevailing horizontal lines of a well constructed wall. Instead they emphasize curves, verticals, and diagonal lines. With larger stones the wall will have the appearance of solidity and the ability to stand by itself without the aid of mortar.

ALPINE PLANTS FOR WALL GARDENS

Achillea tomentosa
Alyssum. All varieties
Arabis Alpina fl. pl.
Arenaria montana
Arenaria grandiflora
Armeria. All varieties
Cerastium. All varieties
Campanula carpatica
Dianthus arenarius
Dianthus caesius grandiflorus
Dianthus deltoides albus
Erinus alpinus
Gypsophila repens
Heuchera. All varieties
Linum. All varieties
Oenothera missouriensis
Phlox subulata. All varieties
Saxifraga. All varieties
Silene. All varieties
Sedum. All varieties
Sempervivum. All varieties
Thymus. All varieties
Tunica saxifraga
Veronica amethystina
Vinca minor
Viola, G. *Wermig*

Illustration 6 shows a wall of some variety in stone, principally a limestone or sandstone in stratified layers, an occasional stone protruding several inches outward from the face of the wall. Scattered quite widely are split faced field stones, and also a few rows of bricks of dark color.

The accompanying diagrams represent a variety of forms and decided differences in manner of building. There are, of course, other types of walls. The New England field stone walls of large and small stones piled in rows along the margins of fields become effective barriers, often displacing fences. They blend into the landscape perhaps more completely than any other type of wall.

Where it is intended to plant small rock plants in the crevices between the stones in a dry wall, the cracks and crevices must be filled with good soil, firmly packed, and forming contact with the soil at the back of the wall.

Where a retaining wall is supporting a steep bank, a pleasing effect can be obtained by building the wall into the bank, allowing the surface of the soil to carry down and over the top.

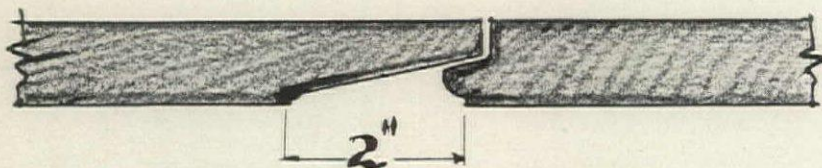
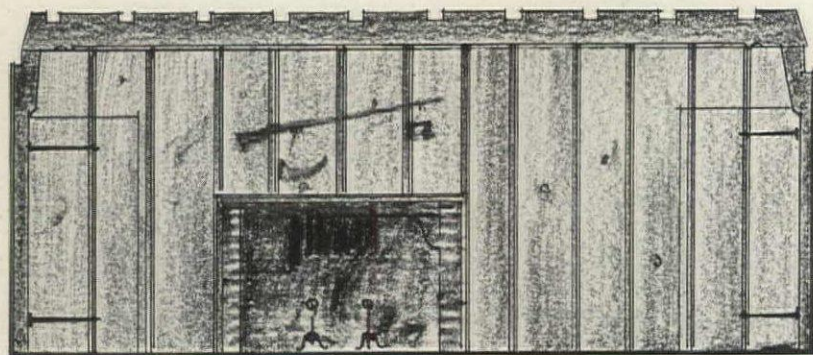
Some of the best alpine or rock plants for garden walls are listed here.

PANELLED WALLS OF WOOD FOR THE SMALL HOME

Certain Types While Beautiful May Be Put On Quite Reasonably

By H. VANDERVOORT WALSH

Professor in the School of Architecture, Columbia University



An example of panelling from our Colonial period found in the Ward House, Salem, Mass. The boards, 18" in width, are lapped, and the edges made into an interesting molding to hide the joints.

ONE of the basic principles in all the arts is that any composition must have unity; that is the parts must seem to belong together to form one thing. A building may be unified by virtue of being one unit, as for example a small house of rectangular shape, covered with a simple gable roof. But, if we go beyond one part and have a number, it is essential that we produce unity by making one central part much more important than the others. A house consisting of a number of extensions should be so designed that these additions are made less high and bulky than the main body of the house.

Now the same is true with the interior of the home. A sense of unity must be produced by the room arrangement inside. The living room should be bigger, have a higher ceiling and be more elegantly treated than any other room, so that it may dominate the plan and give a sense of unity to the house. This is important in the small house.

There are a number of ways of doing this. The length and width of the living room may be made quite large, by contrast to the other rooms. The ceiling may be made higher by not covering the floor beams with plaster, increasing their thickness, separating them further apart than usual and so letting the flooring on top of them

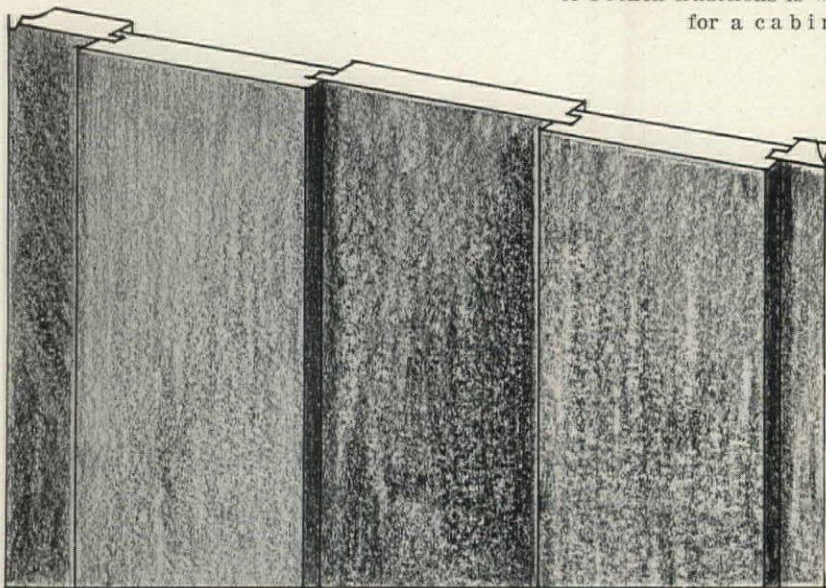
serve as the ceiling. If one can afford it, the living room which extends up two stories in height is most effective. This however is an uneconomical thing to do in a small house. But there is another way of giving importance to the living room which is neglected in the American home. It is to cover the

walls with wood panelling and have exposed wooden beams on the ceiling.

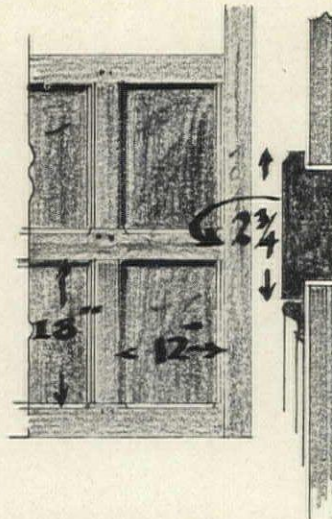
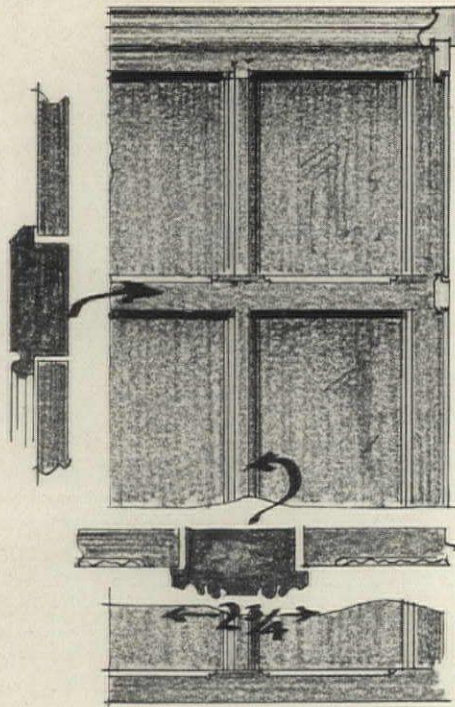
A living room which is decorated in this manner seems to be, if it is properly done, more homelike, than one decorated in any other way. There is a sense of warmth and intimacy about walls of wood. The rich colors and the variations of texture produced by the grain lend an air of dignity. The piano, the phonograph, and the radio sound mellower as the vibrant quality of the wood panels reflect the sound waves. In the cold winter evenings, the fire light seems lovelier as it plays over the browns and golds of the wood. Not only do the panels seem warmer, but they actually are, especially if one coat of plaster has been put on before they are applied.

Without effort, a living room decorated with wood panelling dominates the plan and produces that unity which is necessary in any artistic composition. It becomes the center of the family life, and the members gravitate to it without effort. It is not like so many living rooms which are vacant, except when company comes.

Often, home-owners, although realizing all of these qualities, hesitate to have wood panelled rooms, fearing the cost will be prohibitive. This fear is usually well founded, for wood panelling as installed in the homes of the wealthy and designed after the finest of Tudor or French traditions is work for a cabinet



This method of panelling is not uncommon in Old English Cottages. By fitting the boards together in staggered fashion there resulted a feeling of thickness and a variety of shade very much to be desired.



Another form of English panelling, which may be somewhat expensive for the average home builder, but which is always handsome.

maker. Yet it is possible to select types of panelling that are beautiful, and which can be put on by the ordinary carpenter, at a reasonable price.

Old English cottages offer some suggestions as to the methods of panelling that are simple enough for any carpenter to make. One method, which is quite effective, reveals appreciations of light and shade which the old carpenters had. Vertical boards were laid up so that every other one was forward of those on either side of it, by about one half the thickness of the board. This was done by having tongues along each edge of half of the boards and grooves along the edges of the other half. By fitting the boards together in this staggered fashion, a feeling of thickness and variety of shade resulted. Other similar methods were used in early times.

In our own Colonial period there were similar wooden partitions constructed, but they were slightly more elaborate. Boards about 18 inches wide were cut to make a lap joint at the edges, and then ornamented by an interesting moulding to hide the joint. Sometimes a moulding was also run down the middle of the board to resemble the joint moulding, and make the board seem narrower. Today, if we could get a board as wide as 18", we would be so proud of it, that we would think it a sacrilege to make it seem like two narrower boards.

We can easily sheath our walls, today, with this type of wood finish. Boards of pine, redwood, Douglas fir and yellow pine, or cypress are very well suited to this type of

decoration. An ordinary carpenter can do the work too. In finishing this boarding, wax rubbed into the wood and slightly colored with burnt umber brings out the warmth of the wood and makes a somewhat dull finish in harmony with the simplicity and crudeness of this kind of wood wainscoting.

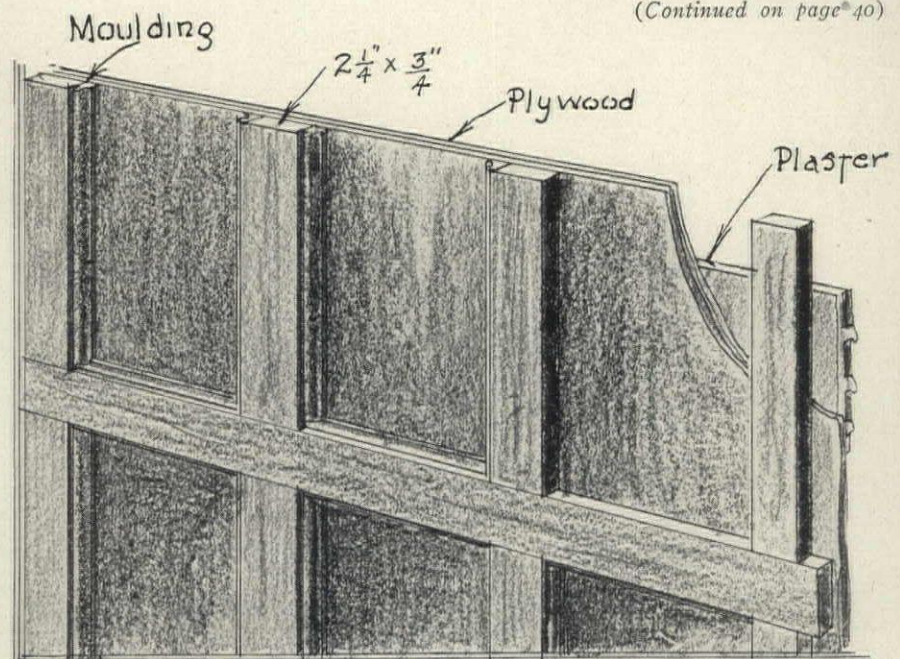
Cypress is most effective for this work because of its prominent grain. If the boards are surfaced with a sand-blasting machine, this grain is emphasized more than ever, because the sand eats out the

soft wood, leaving the harder wood in relief. Drift-wood which has been surfaced by the sands of the beach for years has a similar grained effect.

Ornamental effects, something like carving, can be obtained with this sand-blasting method, at very little additional expense. Designs can be made to stand out on the board by shielding selected surfaces of the wood from the eating action of the sand. Patterns of the design are cut from manilla paper and pasted on the board, so that the portion of the wood under the paper is shielded against the corroding action of the sand-blast. When the process is completed and the paper removed, the ornament will seem to be raised from the surface. Additional effects can be obtained by staining the patterns. Redwood is particularly attractive when treated in this manner.

Of course it will be next to impossible to secure boards as wide as 18 inches, as did our Colonial fathers, but even if it were, they would split under the action of our steam heat in the winter months. However, broad and fine surfaces of wood can be obtained, even more beautiful in grain than ordinary boards, by using plywood. This is a wood board, constructed of three layers of thin veneer. The interior layer has its grain at right angles to the exterior layers. These veneers are glued together under great pressure and are more durable than real boards. Widths of four and five feet are possible which do not crack under the dry-

(Continued on page 40)



A modern form of panelling, which gives quite the same effect as that of the English panelling illustrated above, but which is much less expensive.

WEATHERSTRIPS FOR WILLFUL WINDOWS

*Although Their General Aim is the Same, They Vary in Detail,
in Material, and in What They Accomplish*

By H. A. SIMONS

THOROUGH and scientific insulation of walls and roof retard considerably heat losses, but insulation will not remedy the losses around windows and doors. The cost of installing insulation is a considerable factor in home building. On the other hand, it is comparatively inexpensive to weatherstrip all windows and doors and weatherstrips will prove almost as great an economy as insulation by retarding the loss of probably 25% of the total heat generated by the furnace.

Besides their economy in preventing heat-losses, there are other reasons why weatherstrips should be an important, though not a major, item in every home building budget. They help make homes more comfortable and healthy by eliminating drafts. In some regions especially the Southeastern part of our country, they are almost necessary because of the frequency of sandstorms which, unless the window-cracks are closed, sift quantities of fine dust into the rooms. Similarly, they promote cleanliness in homes in cities where the atmosphere is polluted by soot and dirt. Weatherstrips also reduce in-leakage of rain; and, if they are good ones of modern make, they prevent rattling and sticking of the windows.

In general, it is cheaper to have weatherstrips installed when the house is first built than in an old house. But most types of strips also can be applied, with only slight inconvenience, to windows that have been hung a long time. Some architects advise weatherstripping only after a building is two years old, so that the strips will not be affected by the warping or other distortion of the window frames and sashes. However, within the last several years a number of strips have been invented which help to prevent such warping so that their application at the very outset is desirable in this respect too.

Beveled strips of wood with felt cloth attached to one side comprise the simplest kind of these appliances available to the home-owner. They are intended to be nailed to the outside of the window-frame with the felt butted up tight against the sash. Such weatherstrips are inexpensive and easy for the householder himself to apply; they are effective, too, though not nearly as much so as the more modern kind. The upper sash cannot be lowered with these strips nailed in place. Besides they are un-

LAST MONTH

We learned that the leakage around doors and windows caused 26% of the total heat loss in homes. Can we doubt the wisdom of using weatherstrips when the average cracks around each window of the ordinary home are equivalent to a hole in the wall 13½ inches square?

In this article and the one preceding Mr. Simons presents facts of vital concern to home owners.

desirable in appearance and last only two or three seasons at most.

In contrast with this, most weatherstrips in use today are permanent. Whereas the wood-and-felt strip is tacked onto the outside of the window and serves to cover up the cracks, these others are attached to the sides of the sash and the frame and to fit so tightly together—on the tongue-and groove principle or a similar one—that they do away with the crack altogether. Similar tongue-and-groove devices are fitted to the sill and window-head, and two members made on a variation of the principle are adjusted to the cross-bar.

This description is, of course, only general. Within these generalities are many varieties in detail which the home-owner must choose between. He must be convinced that the one he selects actually will do the work it is intended for, that it is made by a reputable manufacturer with an ample background of experience in the business, and that it is installed, if not by the manufacturer's service-agency, then by mechanics thoroughly competent to do the job.

One thing to be borne in mind in selecting a weatherstrip is the material it is made of. In one of these devices, a zinc channel with a lining of heavy moth-proofed Windsor cloth crimped into it is grooved into the sash, and a ribbed strip of zinc is fitted into the frame so as to press against the cloth. Another type consists merely of substantial strips of spring bronze which are screwed into the channel of the window-frame through which the sash slides up and down. These strips press against the wood to prevent leakage.

But both these types represent departures from the principle generally

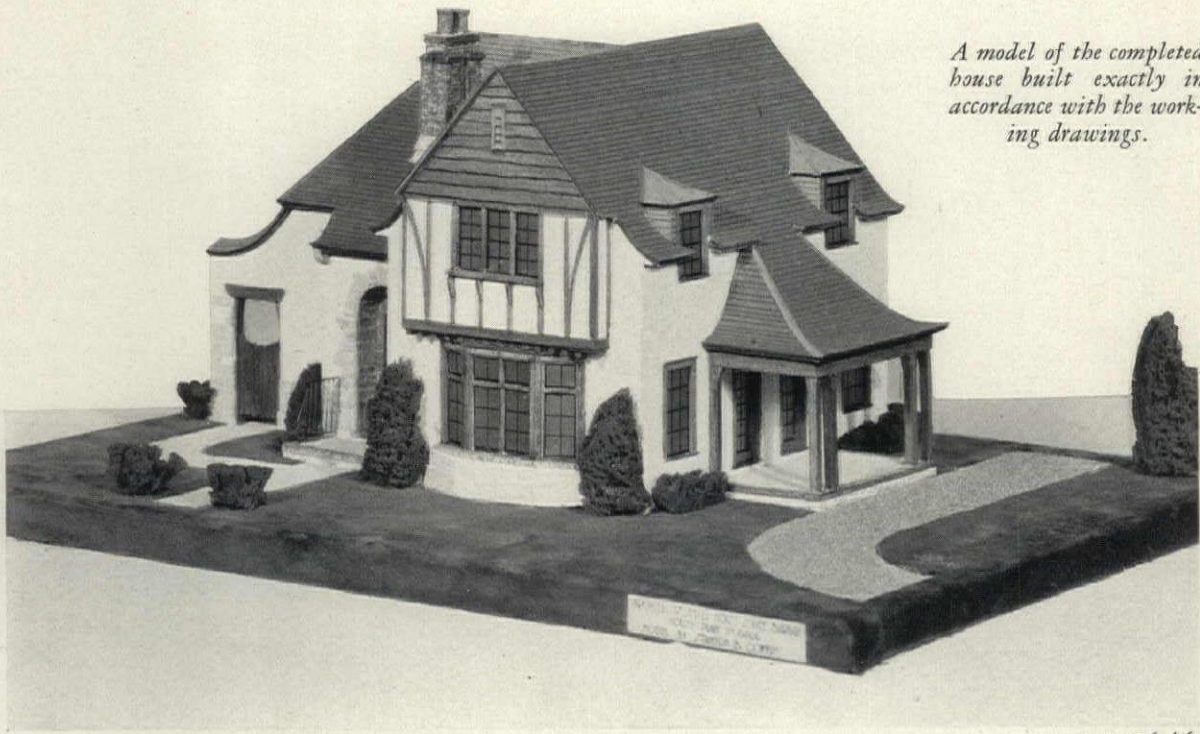
employed. Zinc, cold-rolled bronze and spring bronze are the metals commonly used, and most often they are arranged to provide a metal-to-metal contact. Thus, they are not subject to rust or corrosion; they do not wear out from the lifting and lowering of the sash; and, besides preventing infiltration of air, they tend to hold the window rigid and keep it in general good condition.

Casement windows present rather different problems to the designer of these appliances, but virtually all manufacturers in the industry produce special strips for them. The same is true of "French windows" and of doors. Usually in these cases there is a brass sill with an extruded lip, against which a U-shaped member attached to the bottom of the door itself fits when closed.

Adaptations of these sills form "inside-door seals," which are attached to bedroom doors so that the cold air entering these chambers at night when the windows are opened high does not chill the whole house. Heating engineers oppose the "fresh air fiend" when his enthusiasm leads him to open the windows so that the temperature of the home is lowered more than 10 degrees during the night, and these door-seals permit the enthusiast to get all the fresh air he wants in his sleeping-room without awakening to find the house frigid in the morning.

Of course, even the finest weatherstripping will not prevent all the loss of heat around the windows if the frames are not tightly fitted into masonry construction. To accomplish this, caulking is necessary. The usual material is a loose web of coarse fibre treated with some water-proofing compound. It should be packed tightly into all crevices between the window-frame and the general wall construction. The proper time to do this is during building or remodeling, before the final outside finish is applied to the house. But if leakage at these points is excessive, the caulking can be done with some good effect in a home already occupied.

And it is worth doing. Careful caulking of window-frames and up-to-date weatherstripping of the cracks between the frames and sashes will cut down heat-losses around windows so materially as to make it necessary for the home-owner to buy only three tons of coal where he now has to buy four.



A model of the completed house built exactly in accordance with the working drawings.

DESIGN 6-A-64

THE SEEKER DISCOVERS A POPULAR HOUSE

*And Learns How Easy the Best Effect May Be Lost
Through Minor Changes in the Drawings*

IT was a Sunday afternoon in late spring, warm and sultry so that action of any kind became a matter of determination. The Seeker was regretting bitterly the impulse that had brought him out for a walk, for he was by now plodding along doggedly, a tantalizing vision of his own cool, airy living room before him, of his comfortable easy chair, and the unfinished volume on philosophy he had so wilfully deserted. His housekeeper was a cook to delight the Epicure, and inaction and good living were having their way with the Seeker. He was undeniably putting on weight. A surreptitious glance around assured him there was no one about, so he stopped and leaned against a tree, fanning himself with his hat and puffing quite openly.

A car drew up to the curb behind him, but he did not notice it until a pleasant voice asked, "You're not tired are you—or hot?" His friend, the Architect, grinned at him from behind the wheel, the door opened, and he crawled thankfully into the ad-



Four different houses built from this design are shown here in addition to the above model. This entrance shows the irregular though balanced arrangement of stone about the door.

joining seat without answer.

Around a curve a few hundred feet beyond, the Architect stopped the car again. "Like the house?" he asked, waving a hand toward the opposite side of the street.

That which he indicated was a two story house in the English style, of stone, stucco, and half timber combined. It was a handsome, picturesque dwelling, which stood above a high double terrace, a wooded hillside in the background. Leading up to it was a long, curving flight of steps, stone like that which formed the foundation and framed the entrance.

"Nice work," the Architect commented. "Just fits the site, you know."

The Seeker observed it critically. Since building his own house he was jealously interested in all others that might approach it in attraction.

"Notice the gable," the Architect went on. "Pretty half timber work, that. Nothing elaborate, but it looks almost as structural as the old stuff."

The Seeker let this pass. He



A house well adapted to its hill top site. Due to its irregular level, the stonework in the foundation is more lavish than ordinarily required. The porch is glassed.

Informal and picturesque as it is, this house does not seem restless and complex as is the tendency today.

The effect depends chiefly upon the massing of the overhanging gable, the chimney, the bay window, the doorway, and there is no more variety of materials than required to enhance these main features.

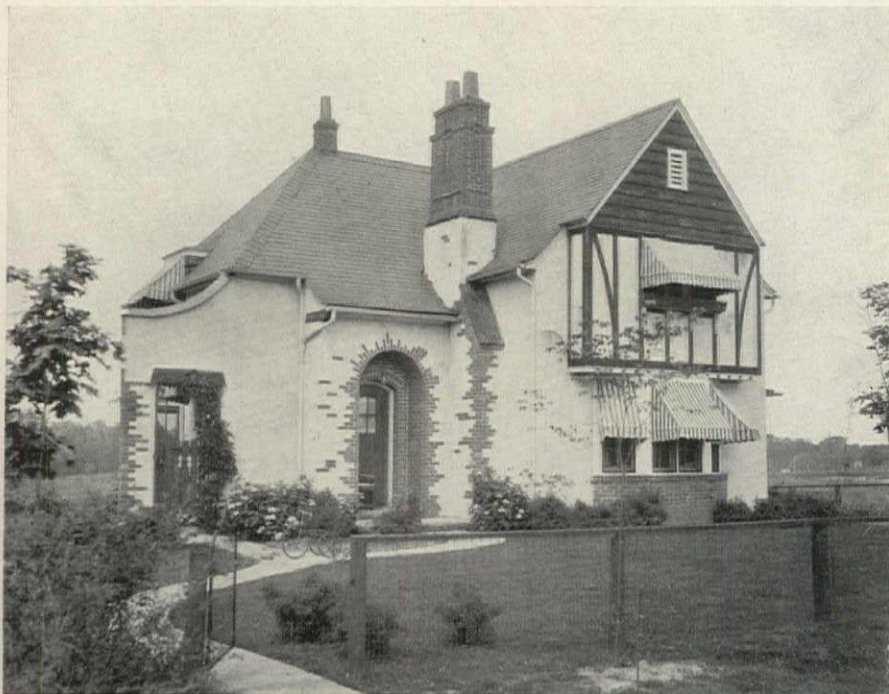
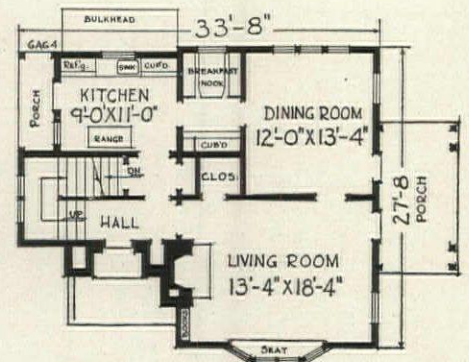
was studying the gate at one side and admiring the manner in which the top of the wall curved downward from the level of the eaves.

"Wonderful what a lot that gate does for the house," the Architect said speculatively as though reading his thoughts. "Makes the house look broad and lower than it is. Saw a photograph of another house where they left it off. Made the house look too high."

"Another house?" the Seeker ejaculated in surprise. "Did you build more of them?"

The Architect shook his head. "That's not my work. It's a Small House Service Bureau design. I superintended one built from the same plans last fall, though. I'll take you through it this afternoon. The owners haven't moved in yet." He started the engine.

"I like the chimney," the Seeker an-



nounced after a last look, "and the little dingusses on top of it."

"Chimney pots," elucidated his friend. There was a comfortable silence between them until they parked in front of another house very much similar to the first. They sat for a few moments studying it interestedly.

"Not so much stonework here," the Architect pointed out, "but that's partly due to the levelness of this lot. This is the way the drawings show it, and less expensive."

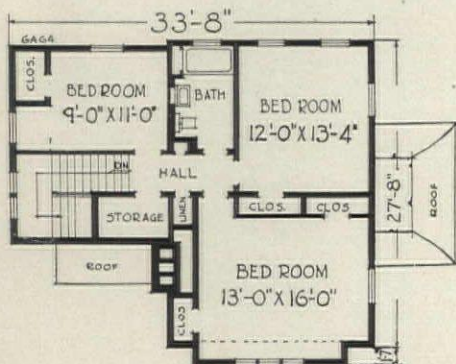
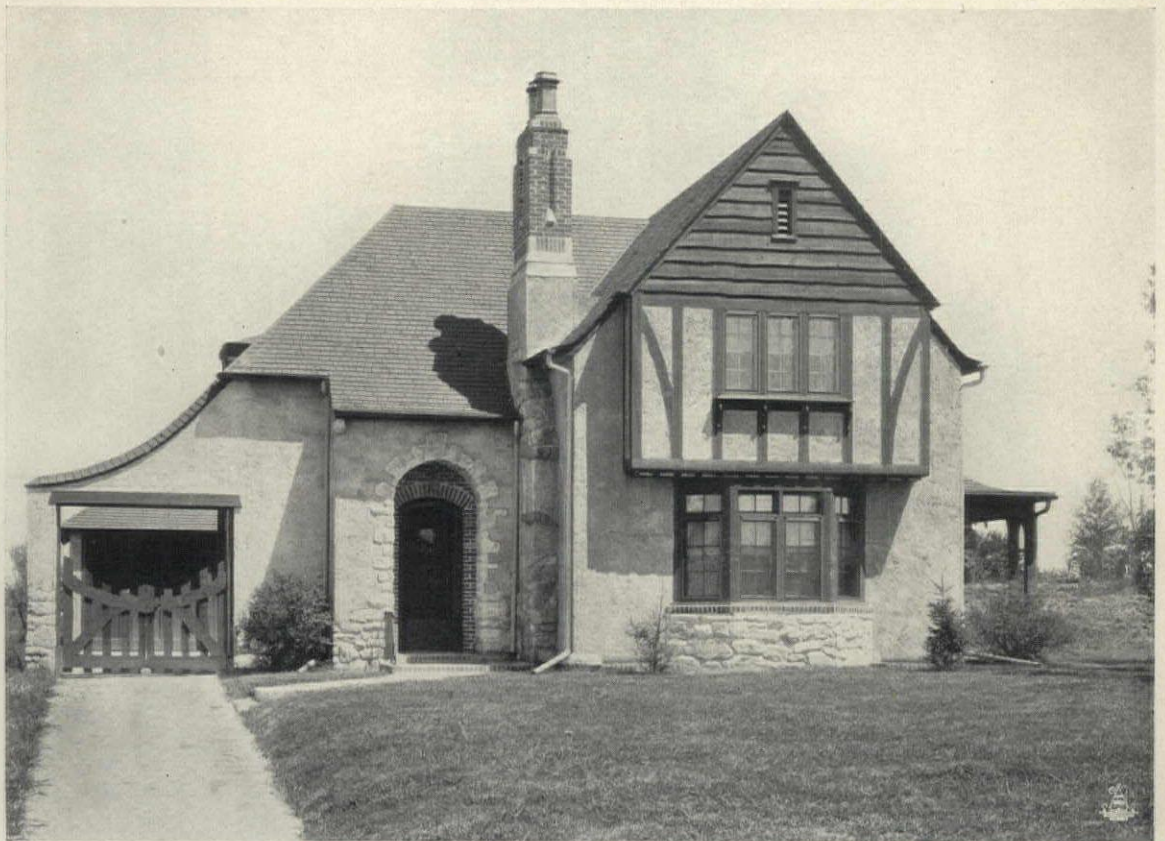
The Seeker noticed that in this case the adjoining gateway was higher and wider. Low gates complete it, and the

Changes from the working drawings were made in this house with results not altogether unhappy. Yet since brick was used about the doorway it would have been better not to have the brick units floating in the plaster.

In building great care should be taken that the drawings are followed accurately, for a change in dimension or variation in materials may produce an unexpectedly unfortunate result.

Next to the proportions no detail can so affect this house as the color or texture of the walls. The stucco should be fairly rough, but not too rough, and rich and warm in color.

The wood of the gable should be rough sawed and stained. Its color should be like the stucco, rich and warm.



announced with unwonted firmness. "You can tell me about the rest of the house. I'll believe anything you say."

The Architect, too, sat down gratefully. "Well, there's the dining room," he enumerated. "You ought to be interested in that. The porch there on the side opens from both these rooms." He waved toward the French door in the far corner of the room. "There's a breakfast nook between the dining

room and kitchen, with a lot of cupboards and drawers along one side of the alcove. The kitchen's a fine one, lots of light, and it has a small porch along one end. You can get to the basement from the hall this side of the kitchen, or by an outside stairway. Want to see the basement?"

He half rose as he asked the question, but the Seeker waved a protesting hand.

(Continued on page 32)

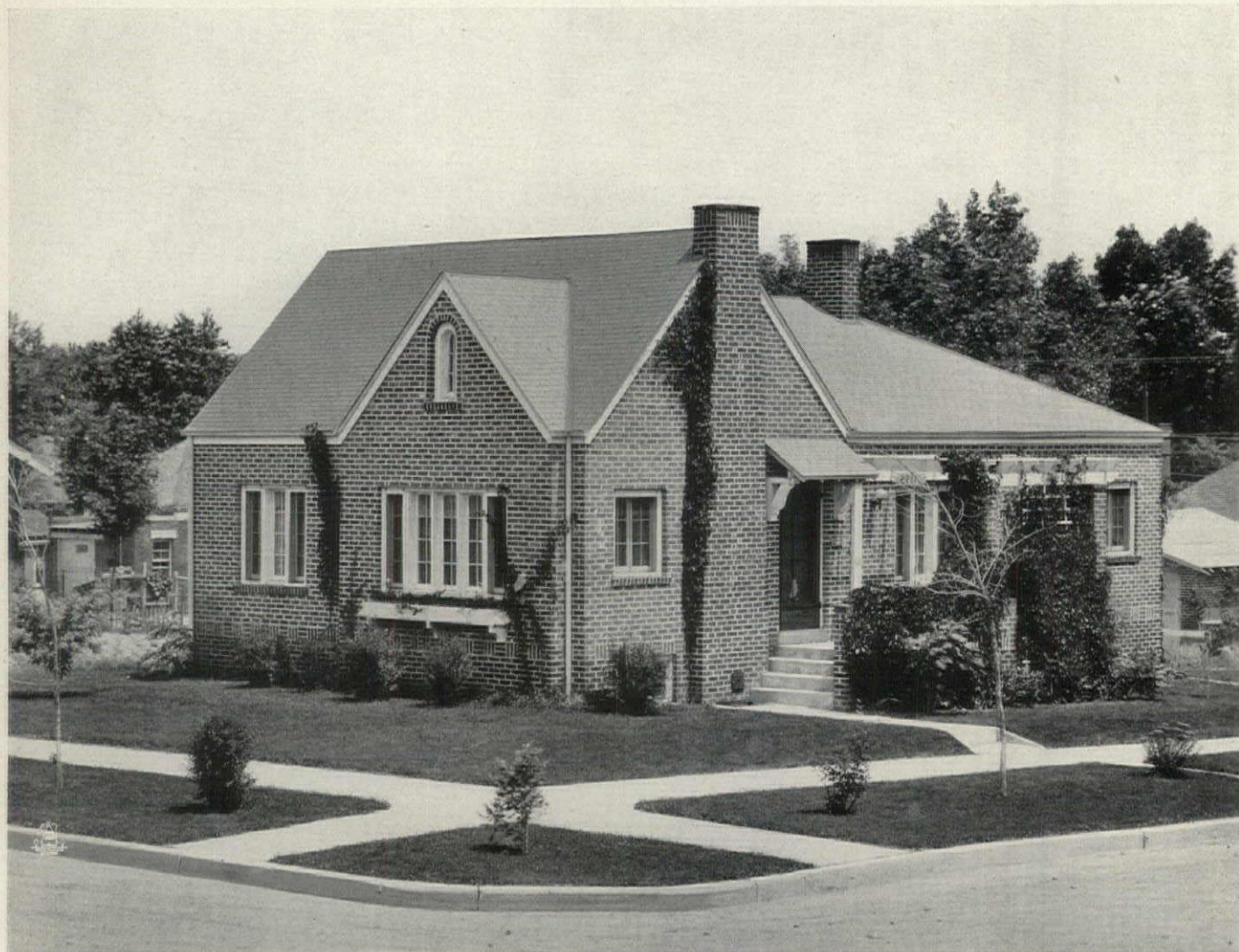
whole arrangement effectively screened the detached garage—never a particularly artistic object.

Inside the house they explored the second floor first; the three bedrooms, all brilliantly lighted, the shining bathroom, closets apparently varied in use. The Seeker lost track of these as the Architect opened one door after another, but he thought there were at least seven.

Downstairs in the living room his attention was immediately attracted to the broad seat in the bay window, and he sat down upon it with a sigh of relief. "I'm sitting here for good," he

This brick variation is pleasant enough as to wall surfaces, but something has been lost by changes in the arch of the front entrance, in the half timber work, in the treatment of the bay window.





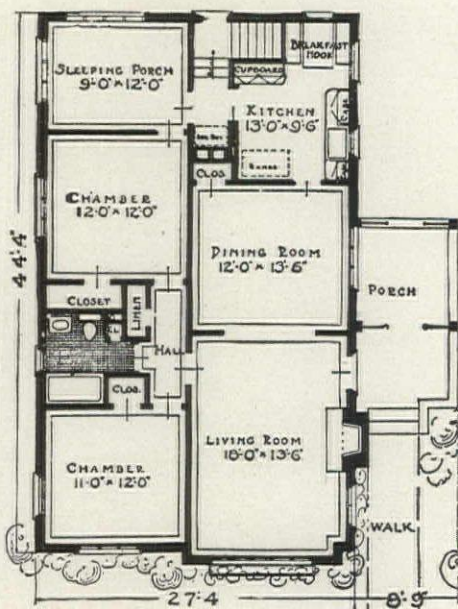
BUILT FROM DESIGN 6-B-19

HOW ONE FAMILY SOLVED ITS PROBLEM

*A Brick Bungalow That Fulfilled Two Desires—
Fine Appearance and Low Upkeep*

ONCE upon a time there was a family who decided to build a home for themselves. After long deliberation and study they decided that it was to be a bungalow of solid brick construction, and that it must have six rooms and a porch of one kind or another.

Having arrived at these decisions, they chose finally to build their home from design 6-B-19, and the house illustrated is the result. Many motives actuated them, perhaps the same that have influenced others to build from this same design. They had, for example, a discriminating taste that differentiated between trick architecture that gives a temporary thrill, and a house of modesty and refinement, in which pride of ownership will not diminish with the years. They liked the placing of the windows,



the treatment of the chimney, and what is perhaps even more important, the arrangement of the roof, which avoids the commonplace of many rectangular dwellings.

Like most families, this one desired a huge living room, but they soon found that would increase the cost considerably. However, after living in this room, although of only moderate size, they found it a very cheerful, comfortable place indeed. With a broad group of windows almost filling one wall, a hospitable fireplace dominating another, and the wide opening on still another side affording a pleasant view of the dining room, the question of greater space seemed hardly important.

Not desiring to do without a dining room, they also included a breakfast nook as a measure of efficiency.



BUILT FROM DESIGN 3-A-15

A LITTLE HOUSE FOR LITTLE FAMILIES

A Letter to the Recent Bride Makes Pertinent Suggestions on the Subject of the New Home

DEAR Margaret:

In your last letter you said you had given up hopes of ever finding plans for a house that you and Jerry could afford. Well I hadn't given up, hadn't even begun, in fact. You really must have a house—so that I can come to visit you if for no other reason. I have been looking for plans ever since you wrote, couldn't have looked any harder for my own house in fact, and at last—reward of virtue, Eureka and all that—I've found just the one.

Don't get excited when I tell you it has three rooms. That's only half of it. Let me assure you, as I have discovered this week, a three room house can be as capacious as a little boy's pocket when it's skilfully designed.

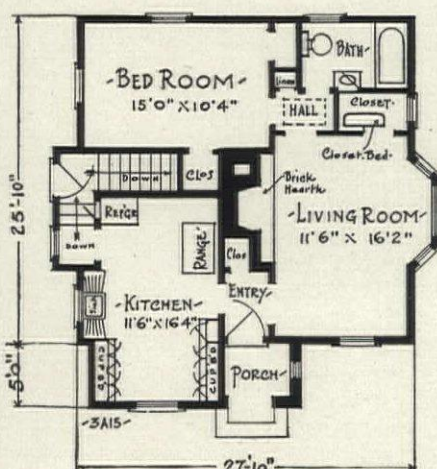
This one is really so enchanting I hardly know where to begin telling you about it. With the kitchen I think,

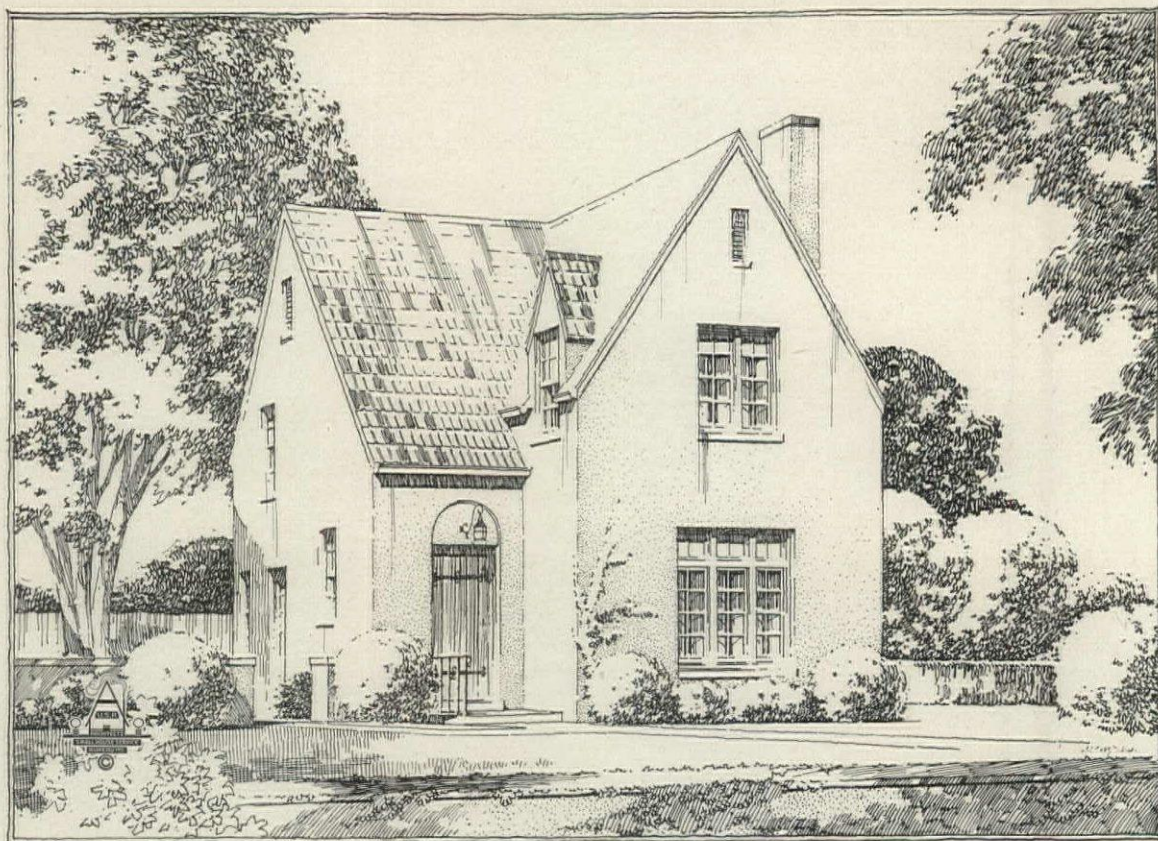
since undoubtedly you'll be spending a lot of time there for months to come learning about calories and vitamins and, incidentally, how to cook. I am

enthusiastic over having the kitchen in front. Think of the panorama that will unfold in front of your windows as you work. Much less chance here to get lonesome or homesick. And please notice all the cupboards on either side in front. You should see all the shelves and drawers and bins the blue prints show. I can't imagine how you can ever begin to fill them all. Under the front window too, you can put a table and chairs for an impromptu breakfast nook.

Now see what a dandy large bedroom the house has, with two windows and as many closets. Notice the hall also. Only "as big as a minute," it still contrives to include a linen closet, a place for all your lovely towels and things. Speaking of "and things," a scuttle in the ceiling of the hall leads to storage space in the attic, where you

(Continued on page 43)

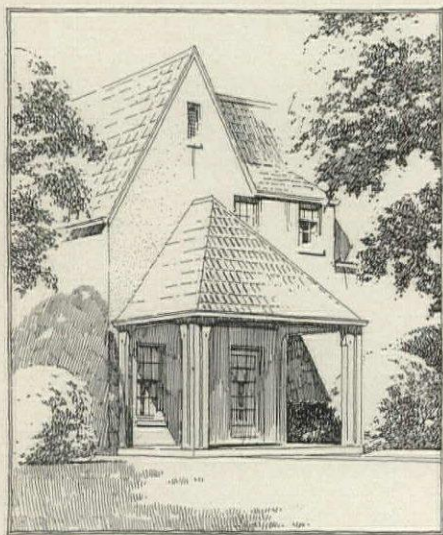




DESIGN 4-K-18

UPSTAIRS AND DOWNSTAIRS

*Four Room House With Six Room Capacity
For a Narrow Lot*



make this portion of the house bright and cheerful at any hour of the day.

Opening from it is the porch shown in the sketch. Grandfather placed his porch at the front to watch the horse and buggy parade in comfort. We place ours at the rear, where we can enjoy the garden and at times partake of meals.

The house is efficient throughout and

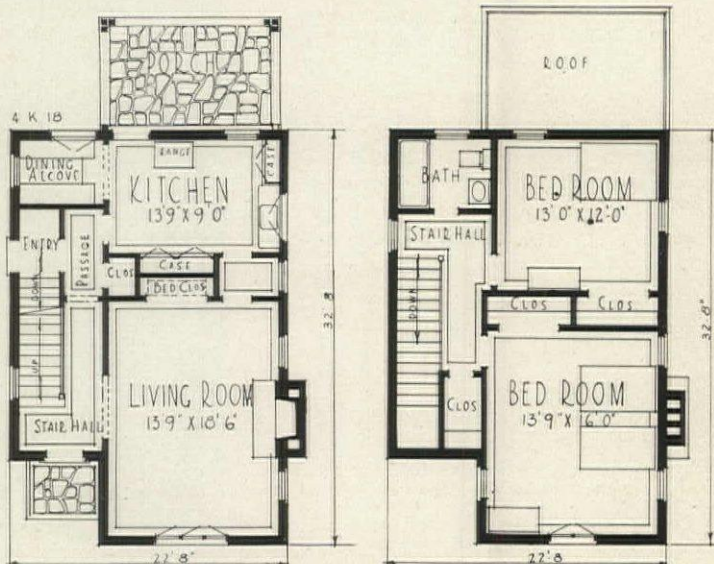
so narrow that it will go on a 30 foot lot. Besides this it is beautifully designed. The arrangement of windows, walls and roof show the skilled designer. Not only is it fine appearing but of excellent plan and construction.

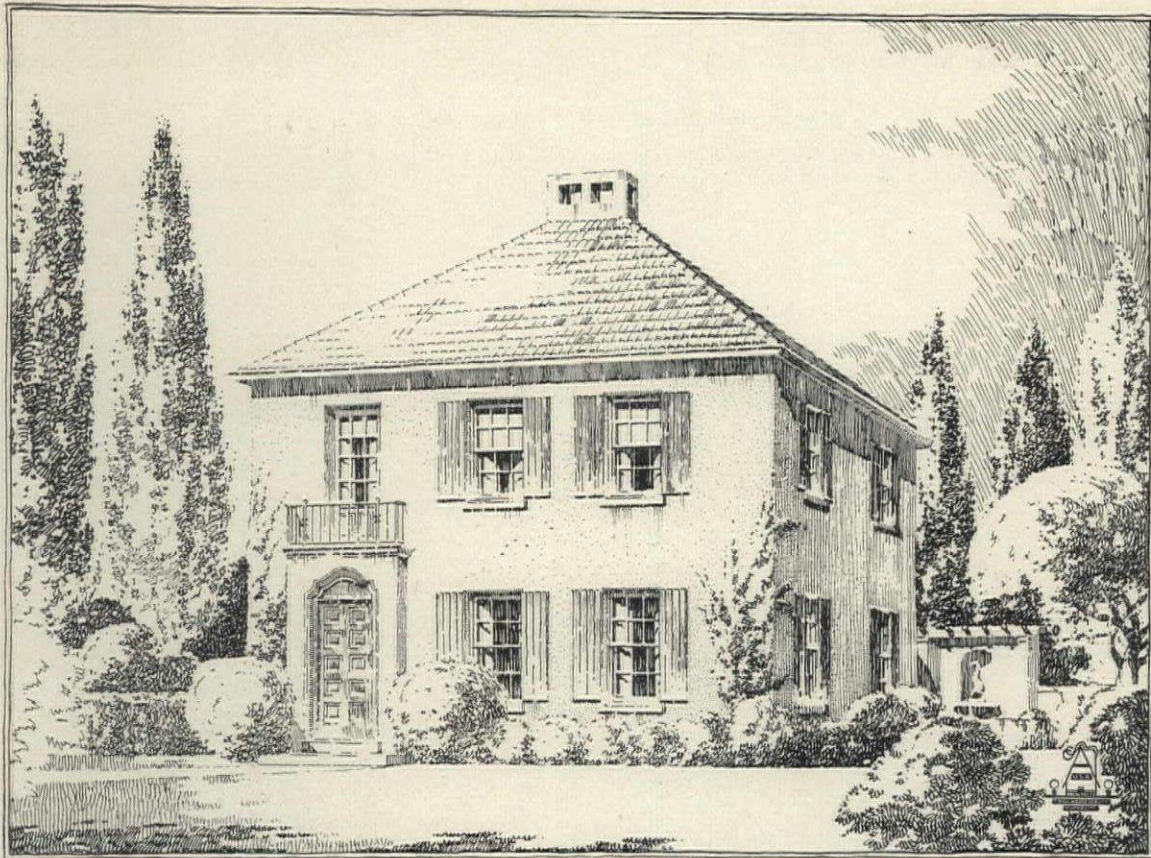
The walls are of concrete masonry, exterior finish stucco, roof cement tile, first floor slab of concrete.

HOW do we manage to live comfortably in so much less space than our grandfathers considered necessary? Here in design 4-K-18 we see the answer. It is done by facing the problem of what our needs are as to space and equipment, supplying these, and eliminating the rest.

For example, although this is a four room house, we have actually three bedrooms, two upstairs and another down. The modern closet bed in the living room gives us the third bedroom.

Again, we save costs and retain useful space for other purposes by omitting the dining room. Drawing up chairs around a table in the kitchen is the old fashioned way. Here we have the dining alcove, plenty of space for the family and for intimate guests. On more formal occasions the dining table can be set in the living room. Windows on two sides of the alcove and on still a third side in the kitchen





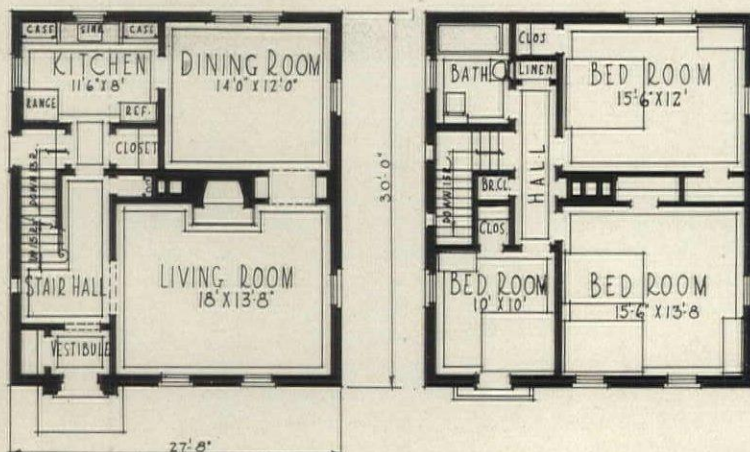
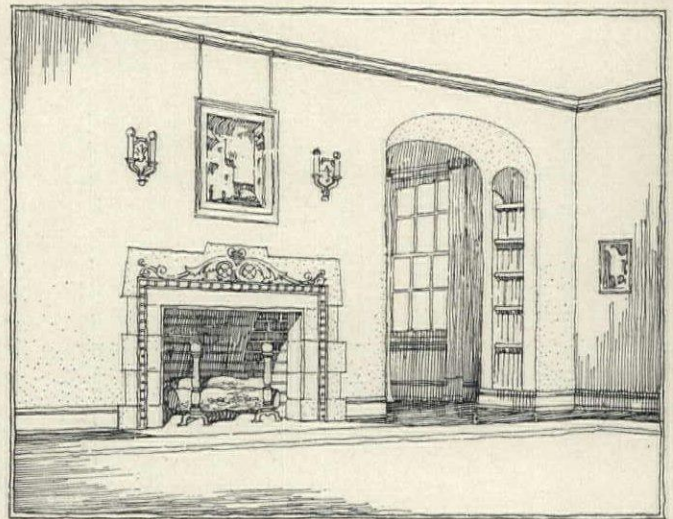
DESIGN 6-K-17

A HOUSE ON THE SQUARE

*Literally as to Plan, Figuratively
as to Construction*

THE architect who can make a square house a thing of beauty at moderate cost, using little more than the basic elements of construction, is a good manager. Luckily good managers are not rare in the profession, and many of the modern square houses are extremely pleasant to the eye, of sound construction, and with plans that make them delightful places in which to live and convenient and efficient workshops.

This is such a house. There is beauty here without the addition of extra details—excepting perhaps the shutters at the windows, which are inexpensive, and a little orna-



mental work about the door. Fundamentally the design is good, for the walls are well proportioned, the openings properly located; the roof does not strive to be anything more than the necessary finish at the top of the building.

In addition, the plan is honest. In a space practically square are six rooms of adequate size, arranged in accordance with an old and well established plan that thousands of home builders have tried and found entirely satisfactory. Enumerating the accommodations supplied; there is a beautiful open stairway, an archway between stair hall and living room, a decorative fireplace, a handsome dining room, a completely equipped kitchen efficiently arranged. The construction is the same as that of design 4-K-18.

THE OIL HEATER IN THE ASCENDENCY

An Interview With Prof. F. B. Rowley

Director Experimental Engineering Laboratories, University of Minnesota

By THOMAS E. STEWARD

"MOST people who have once operated an oil burner in their furnaces are unwilling to go back to coal."

This statement sums up what Professor F. B. Rowley, head of the experimental engineering laboratories of the University of Minnesota, has to say of the users' satisfaction with a type of heating that is coming more and more into use as each year passes. It applies with equal force, he believes, to the owner of the small home and the owner of the large. In fact he believes that the oil burning type of house-heating equipment is just as applicable and just as advantageous to one type of house as to the other.

Over a number of years Professor Rowley has been experimenting with problems related to house heating. More of his work has been devoted to keeping the house warm after a furnace has done its work, which is to say, to insulation and the prevention of heat losses, than to the actual heating apparatus. But he has tested a large number of pieces of oil heating apparatus, and he has investigated house-heating agencies thoroughly in connection with his more intensive studies into problems of heat losses and its prevention.

THE advantages of oil burners in the small home, which will be enumerated, are about the same as in the large home with one exception. In eliminating the coal bin, the burner actually frees a larger percentage of the space in a small basement than it does in a larger basement. If the small basement tends to be crowded, and some times it does, then the saving of coal bin space may be important.

"If the prospective builder of a small house plans to install oil heating apparatus, or the small home owner wishes to change over from coal to oil, his main purpose should be to obtain a burner that is proportionate in size to the size of his house," Professor Rowley points out. "The waste and inconvenience that would result from installing too large an oil burner in a small home might more than offset all the other advantages to be obtained. This is distinctly one point on which the small house owner should use especial care."

Advantages of the oil burner are for the most part rather simple ones and obvious. Many engineering problems are found to have reasonably simple and obvious solutions, once they are hit upon. For oil heaters, Professor Rowley points out the following advantages.

They are far more cleanly than coal-type installations.

Fuel is more easily stored and more readily concealed and kept away from the rest of the house.

Oil burners can be regulated more satisfactorily under all mild weather conditions than can coal burners.

Oil burners can be operated more conveniently, can be shut off instantly and as readily started up with the aid of the pilot light.

Oil burners eliminate the necessity of removing ashes, that bugbear of the average householders life.

There are no "coal delivery" days, when masses of coal dust flood the basement and work up into the first floor rooms and even higher.

So much for the advantages of the oil installation, several of which must be discussed in greater detail.

Against these Professor Rowley brings out, chiefly, the point that no saving in cost can be expected, either in installation or in fuel purchases. A good oil burner, he says, can be operated for approximately the same cost as a coal furnace in which anthracite is burned. In Minnesota, which must be taken as his price-basing point for the fuel in this example, anthracite can seldom be obtained for less than eighteen dollars a ton, and the average small home burns from seven to ten tons a winter, giving a fuel cost of never less than \$126 a year and ranging from that up to \$180.

THERE is a wide range in the cost of the original installation, which in a very few instances may be as little as \$50, and which runs up from that figure to \$700 and even \$1,000. These figures, however, are for the oil burners alone, and it must not be forgotten that they are over and above the cost of a complete coal burning equipment, for it is in the furnace that the oil burner is installed. Furnace, chimney, pipes, radiators, and all other paraphernalia of the complete coal burning apparatus

must be installed, and in addition the oil burner, which is to be used to heat the furnace instead of coal.

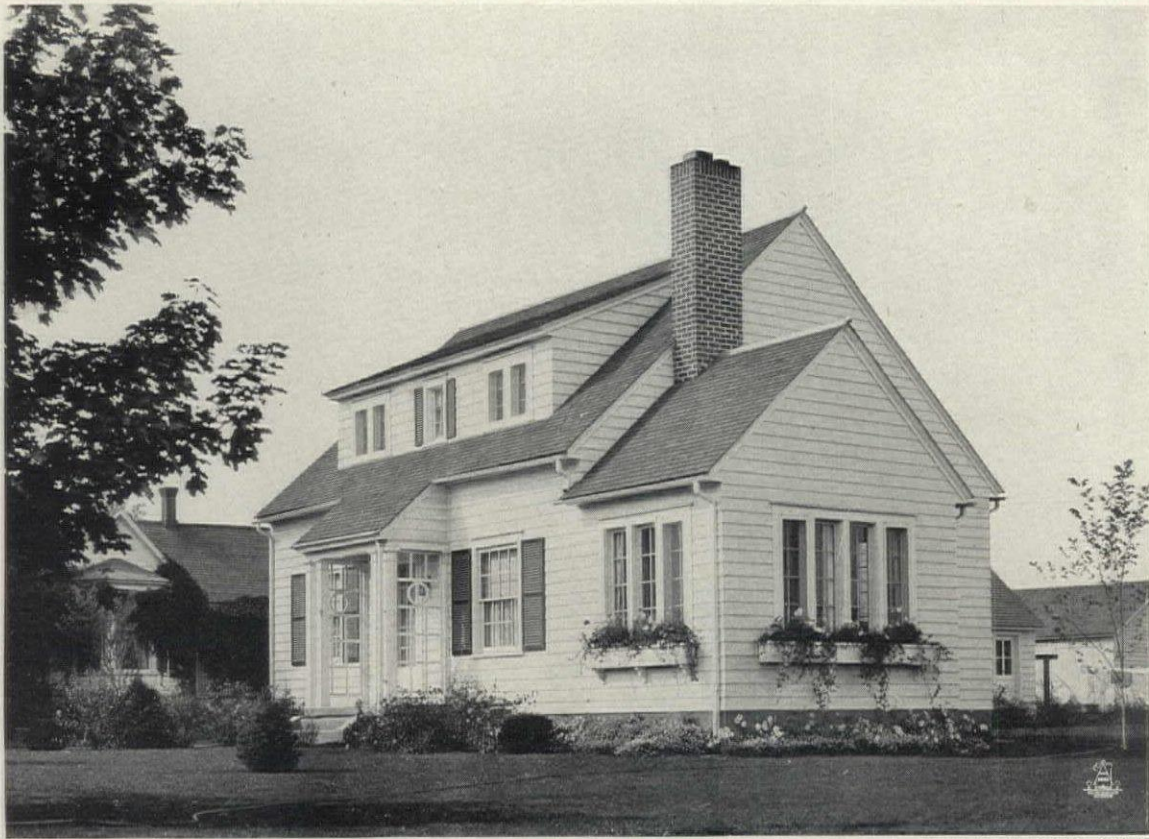
THE other possible disadvantage of the oil burner is that it may sometimes overheat. Heat regulator companies have given their most earnest attention to this problem, and an increasing number of excellent regulators have come on the market. These have greatly reduced the over-heating danger, but it is upon one of these regulators that the house owner must depend if he is to operate an oil burner in safety.

"Unless there is accurate regulation, trouble is almost certain to come," Professor Rowley declares. "In the first place, every home with an oil burner must have thermostatic control in its living rooms. Otherwise the automatic phases of control are lost entirely, and the burner keeps on consuming fuel long after it has heated the boiler enough to assure warm rooms overhead.

"But even thermostatic control has been found insufficient, because the steam or hot water in a boiler is likely to be hot enough for practical heating purposes before this heat has been fully reflected in living room temperatures. The oil burner should be choked down before the thermostat upstairs above the basement can do the job."

TOWARD this end several new types of regulators have been evolved. These are downstairs on the heating apparatus. For steam heating plants, a pressure-stat has been worked out, which cuts off the oil burner flame when the steam pressure has reached the point at which it should stop. For a hot water plant a temperature control has been evolved. It shuts off the oil blaze when the water in the tank is hot enough, whether that warmth has or has not been reflected as yet in the temperature of the rooms to be heated. Still a further step has now been taken in the development of what is called a "stack-stat." The stack-stat is placed in the path of the flue gas leaving the boiler, and it operates only when the temperatures of these gases drop below a certain point. Thus if for any reason the fire was to go out, the drop in flue gas

(Continued on page 42)



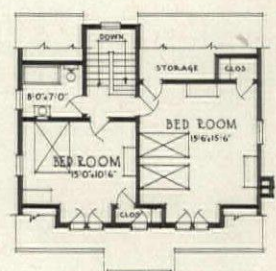
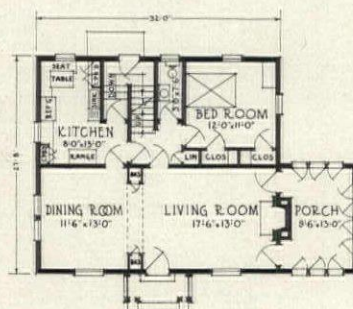
BUILT FROM DESIGN 6-A-48

IF FUNDS ARE LIMITED

*The Sun Room May Be Omitted and
the Second Story Left Unfinished*



*A house equally attractive whether finished in shingles or wide siding.
Notice the convenient kitchen, the downstairs bedroom and lavatory,
the location of the stairs responsible for greater living area.*



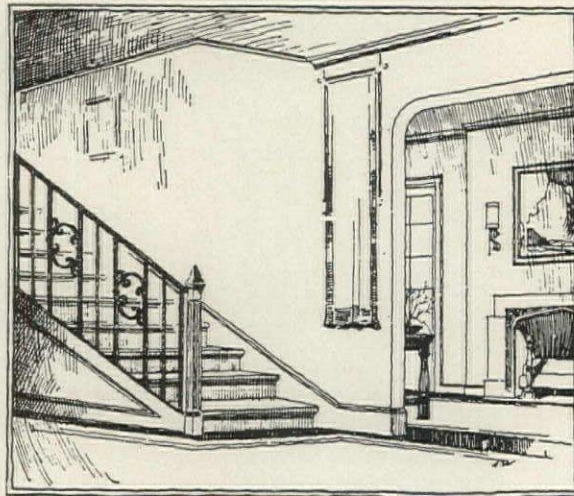


BUILT FROM DESIGN 6-D-4

THE IMPORTANCE OF LITTLE THINGS

A House That Proves the Truth of This Once More

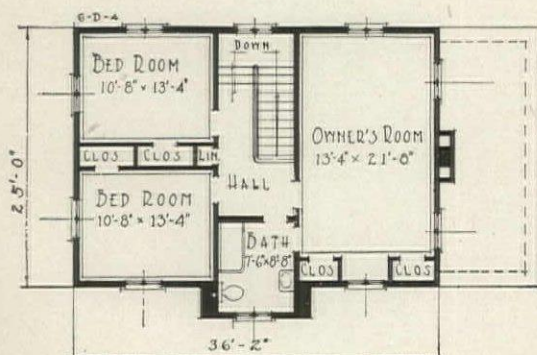
OF course the big things about a house—the proportions, the arrangement of the roof, the size and location of the openings—must be fine if it is to pass critical inspection. But these alone do not bring the charm and beauty that every home builder desires. It is the smaller details that make up this. Here we find them in the broad bands of moulded ornament about the doorway and over the windows, in the gabled entrance



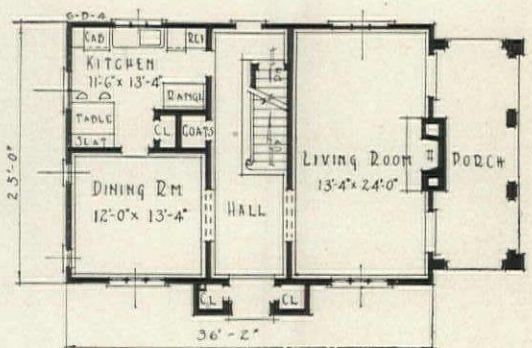
feature and in the small dormers which interrupt the eaves. The casement windows with their many small panes play no insignificant part also.

Inside there is the broad open stairway with its graceful wrought iron balustrade, the beautiful arched fireplace, the wide openings from the hall which afford lovely vistas.

The construction is of wood frame, stucco finish, roof of slate or shingles.



Note the large size and splendid lighting of all rooms, particularly of living room and one bedroom, the sweep of the hall from front to back, the broad porch, the many closets, the breakfast nook provided in the kitchen.



YOUR HOME—a place of Rare Charm, Character and Beauty, when built of wood

.. and this plainly marked lumber safeguards your investment for years to come



Note how wood is used to make these interiors charming, livable and homelike. Building a house like this, of grade-marked lumber makes it a real home—the kind you want to own and live in yourself

Plainly Marked Lumber Safeguards Your Investment!

Know the lumber you use! "American Standard Lumber from America's Best Mills"—manufactured to standards endorsed by the U. S. Department of Commerce is now available with the grade (quality) *plainly stamped on each piece!* This means you get exactly what you specify and

what you pay for. To further protect every home builder's investment the National Lumber Manufacturers Association guarantees, to the lumber dealer, that each piece of lumber bearing its "National Tree" symbol is exactly as represented by the marks of the expert grader. Be sure to inquire about this grade and trade-marked lumber when you build or buy . . . it increases the resale value of your property.

A PROMINENT architect and builder recently said of a group of very attractive small homes, "Wood puts character into the design of every one of these houses. Siding, stained shingles, rough hewn timbers, combinations of wood and other materials — all make each house outwardly different from its neighbor, attractive.

"Knotted pine, birch, and cypress wall panels, beamed ceilings, built-in corner cabinets and book shelves, planked floors of oak, pine, and cypress all add to the unique appeal of the interior. Douglas fir, redwood maple, gum, and other woods add further charm and variety to inside treatment."

No other building material gives such a variety of beautiful effects as lumber. Only wood offers—inside and out—such decorative possibilities.



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There are many interesting booklets from the Lumber Library you will want to read. One, "Taking the Mystery out of Lumber Buying," should be read by every prospective home builder. Your copy is free!

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Gentlemen: Please send me, free, a copy of the booklet checked below:

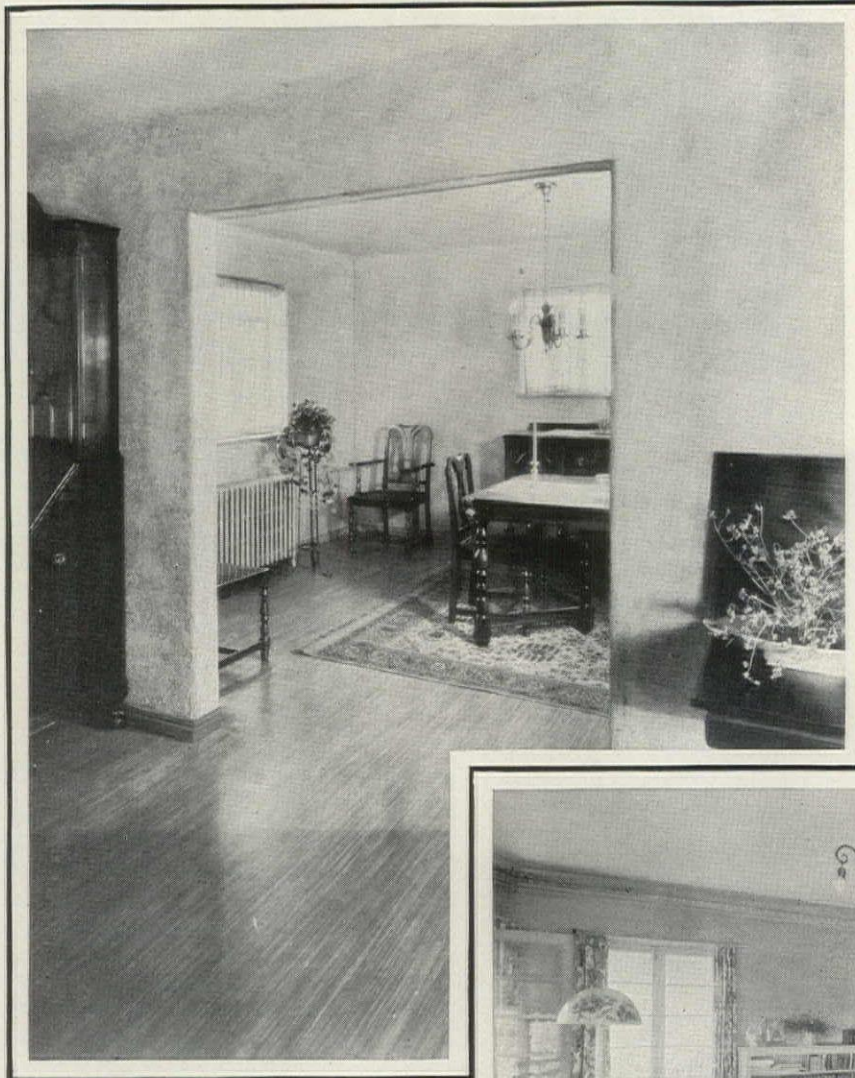
- ☐ "Taking the Mystery out of Lumber Buying"
☐ "Modern Home Interiors"
☐ "Houses of American Home Lovers"

Name

Street

City.....State.....

The key



TWO FIRESAFE HOMES

AT THE LEFT is pictured a home which has a firesafe concrete floor under an attractive covering.

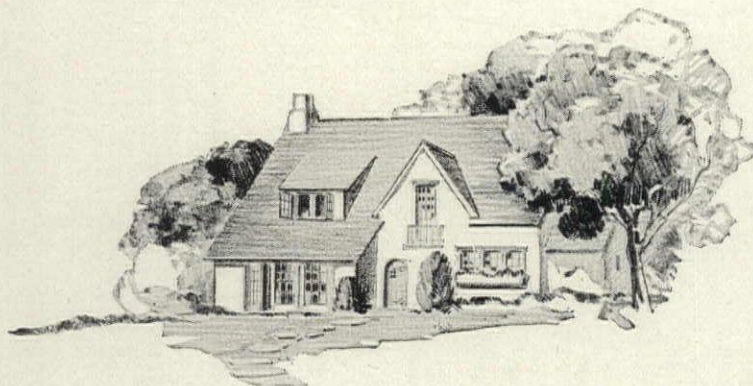
THE PICTURE AT THE RIGHT shows the living room in a home which also has a concrete first floor. Here the concrete is not covered with any other material—it is troweled smooth, colored, marked into squares and wax polished



PORTLAND CEMENT

CONCRETE FOR PERMANENCE

to firesafe homes



SUPPOSE that fire should destroy your home tonight! Doubtless you are insured against *financial* loss—but money cannot replace cherished possessions, nor compensate for the danger and anxiety that fires always bring.

Basement fires are especially dangerous and costly—at least one-third of all residence losses are due to them.

A concrete walled basement, and first floor of reinforced concrete, will effectually control this fire-hazard. It is the key to firesafe homes—the first line of defense. Even though the rest of the house may be burnable material, the slight extra expense of a concrete floor is more than justified.

The surface of the concrete floor may be of hardwood, tile, or linoleum; or the concrete itself may be finished smoothly, tinted, and waxed—some very beautiful effects are secured in this way.

A concrete first floor increases the strength and durability of the entire house. It prevents sagging and settlement of partition walls, thus eliminating one cause of cracks in plastering.

It is best, of course, to build a house of concrete throughout—cellar, floors, walls, and roof; because you will then have an absolutely firesafe home—and at a cost surprisingly low. But whatever the materials in the rest of the house, insist upon a concrete basement and first floor.



If this subject interests you, send for our booklets about firesafe first floors—called "The Key to Firesafe Homes." Send for a free copy today.

ASSOCIATION *Chicago*

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With a Good Roof

Beautify Your Home
With an Attractive Roof

Make Your Home More Valuable
With a Permanent Roof

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all these merits which you
doubtless recognize as*

Genuine Natural Slate

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When once laid needs no further attention.
No Painting, No Staining, No Patching.

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struction today calls for the same type of
roof that was used a thousand years ago.*

Vendor Slate Company
EASTON, PENNSYLVANIA

THE SEEKER DISCOVERS A POPULAR HOUSE

(Continued from page 21)

"There isn't a basement in the world that would tempt me to climb another flight of stairs on a day like this."

"Well, that's all then," the Architect announced half regretfully. "Makes a great house, but there certainly are a lot of ways to spoil it. Stucco too rough, half timber too dark—or too light for contrast—changes in proportions, yes, and stones floating around in the trim as you sometimes see them. None of them would improve the

appearance at all or lower the cost."

The Seeker suppressed a yawn. "In other words, don't change the drawings."

"Check," the Architect laughed and gave the Seeker a friendly poke. "What do you say we go over to your house and eat. My wife's out of town."

They rose as one man.

* * *

The construction of this house is stucco on metal lath over wood frame, native stone trim, shingle roof.

COLOR SCHEMES FOR THE KITCHEN

Washable paint finishes have been a boon to housewives for a number of years. Who shall say that they are any less valuable today because they have blossomed forth in all the freshness and gayety of the rainbow? Labor saving they still are, but their lovely colors lighten the heart and cheer the soul in a manner never even approached by the dull, conservative tones that covered the walls of many old time kitchens. The difference between working in a dingy, dark kitchen painted perhaps a dull olive green, and in one where sunshine yellow walls and woodwork of old blue are a joy to the eye, is more than a little psychological, a difference which marks the cheerful, happy housewife from one who is dreary and discontented.

From a practical standpoint the importance of using paint or enamel finishes in the kitchen cannot be over-emphasized. They are sanitary, since paint affords no food for vermin or bacteria, and their smooth, hard surfaces collect the minimum of dust and germs. They may be wiped off easily

(Continued on page 34)

The Happy Little SONG BIRDS

Are here for the summer



Wren House



Flicker House



Martin House of 48 Rooms



Free

This fascinating book, "Your Bird Friends and How to Win Them" sent to anyone who loves our beautiful song birds. It illustrates, describes and gives prices on all styles of bird houses, shelters, bird baths, special foods, etc. Mailed free on request.

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COLOR means greater satisfaction in your home

The dwelling illustrated above is more than a house. It is a home, built to be lived in. Its fine Forestblend exterior bespeaks good taste and excellent judgment. Permanent, firesafe, free from upkeep costs, of course, but the famous Forestblend brick add much more. They add the attraction of color, color that is obtainable only in this distinctive brick. The owner will not be harried by constant paint upkeep; his insurance cost is less; his investment depreciates more slowly.

This home is well planned. Modern conveniences abound. The rooms are well lighted, everything has been designed with the needs of the housewife in mind.

"Beauty in Brick" the Finzer plan book of homes "built to be lived in" contains the illustration of this and many similar dwellings. It contains, too, many helpful suggestions for the prospective builder. Write for it today—the price is only fifty cents.



BEAUTY IN BRICK
Forestblend
Homes

THE FINZER BROS. CLAY CO.

Members of the American Face Brick Association

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This diagram shows the unique magazine feed principle of Newport Boilers. You fill the magazine once a day to two or three times a week, as the weather demands. As the fire burns, gravity feeds down more fuel and maintains an even fire-bed.

COLOR SCHEMES FOR THE KITCHEN

(Continued from page 32)

with a damp cloth and thus kept fresh and clean, but to make doubly sure, the walls may be thoroughly washed without harm to the colors and finish. Pipes, cabinets, and cupboards should all be painted or enameled so as to present smooth, washable surfaces to be cleaned.

This is the practical aspect of the question, but the psychological side, and the aesthetic, too, should have consideration. More and more this is coming to be understood. When you use paint for sanitary reasons, you are using at the same time the most flexible of decorative mediums. It is just as cheap, just as easy, and equally as sanitary to paint your kitchen walls primrose color as it is to paint them white or some dark color that is depressing. It costs no more in dollars and cents to make your kitchen attractive than it does to make it an efficient workshop. What it does take, rather, is a little more time for study and planning, but the results will more than justify this.

Here are some color schemes for kitchens that may be taken as a starting point. The possibilities are almost infinite, however, and from these housewives may work out any number of color schemes according to the dictates of fancy. Since the kitchen is not an exhibition room where callers come to visit—later, perhaps, to criticize—it may combine any colors that the housewife may desire; any colors that she will find it satisfactory to live with, that is.

Walls may be a warm gray, almost a buff, with woodwork of apricot color. Green combines well with apricot, so why not have the inside of the cupboards painted Midas or lettuce green, and the kitchen chairs and table as well? The chairs might be striped with black. With gay curtains of green and white gingham, this would make a kitchen in which the whole household would revel.

Another suggestion is to have walls of ivory, with woodwork of mustard color stenciled with sage and beige brown, and furniture and perhaps the inside of the cupboards painted a brilliant Chinese red. The inside of the cupboards, indeed, is almost a chapter by itself, for here any one of a number of vivid colors may be used to achieve contrast with the softer tones that are more preferable in the long run for the larger areas of walls and woodwork. Striping the edges of the shelves in black or a complementary color adds still more vivacity to the scheme.

A cool green kitchen could be trimmed with peacock blue, mauve or apricot.



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Porch Furnishings chosen with care . . . Lamps, Rugs, Bric-a-brac, etc. arranged tastily . . . a fine "ensemble" in fitments . . . *your* time and money represented in every purchase;—and THEN!—

A quick, hard shower, a driving, drenching rain! "Roll up the Rugs, —cover those Cretonnes,—protect that Bridge Lamp—move those new Pillows!"

Maybe you're in time. Maybe not. Anyway, the scorching sun glare comes next day; more trouble.

Why Take Such Chances

Why indeed, when a Satisfactory, Easy, Inexpensive solution of the problem is just install a set of

WARREN'S PORCH SHADES

WARREN'S "IDEAL" Shade, more popular today than any time in 20 years. WARREN'S "RAIN-TITE" Shade, absolutely Rain-proof, Sun-proof, Sight-proof, yet full ventilating.

Choice of either shade in all widths 3 to 12 feet, and in Sylvan Green, Woodland Brown or Natural; oil-stained colors, smooth velvety slats; easy to hang, easier still to operate, and so easy to pay for. Durable too;—long years of service.

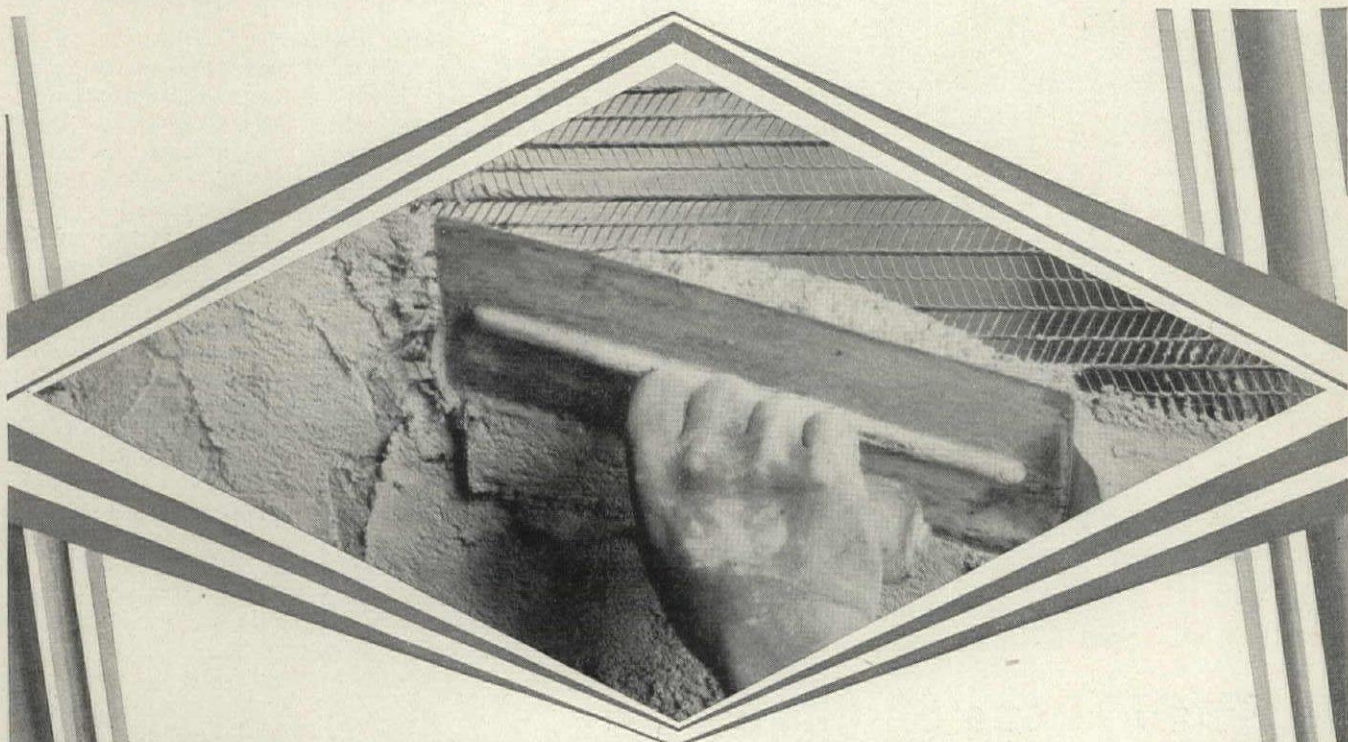
Whether you're building or only remodeling, tell your contractor to include WARREN'S PORCH SHADES in the specifications. He can order direct from us in case your local dealer doesn't handle them.

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GENFIRE

FIRESAFE BUILDING PRODUCTS



Ask
Your
Dealer!

OUR HERITAGE OF FURNITURE

(Continued from page 12)

1825. Empire has distinctive lines, a certain curve that dates from the glory of Egypt being one of its distinguishing characteristics. And it is a significant thing that although practically a whole century intervenes, some of the best modern pieces have a distinctly Empire feeling, and will fit into a room that has Empire or late 18th century as a background. That is a very interesting fact. The radical modern designer says, "Out with everything of the past," but we know better than that, and even if we wanted to do it many of us could not afford it. So we can show our place in the scheme of today by adding to our ensembles modern pieces that take their place in the scheme we are carrying out. If we can't find them, then we had better leave them alone until we can find what we want or can design a room from the beginning.

Another influence that can be seen in modern furnishing is that of peasant work. The peasant of Europe although he has borrowed many of his styles from his superiors adds a sincerity and a structural honesty to his pieces that are unmistakable. Perhaps one of the most characteristic peasant arrangements is the bench built around the corner of the general living room with the dining table set in front of it with chairs or benches on the other two sides.

In closing the best I can say today is that we should keep our eyes and ears open to what is going on in this busy and vital time that we are living in. Let us each be a part of it and not dead branches strewn by the wayside. Even though we may not understand and certainly may not like all that we see let us try to be fair and open minded. This is a time of changing values, and often the best of us suffer greatly from growing pains at such a time. If we get the right point of view it can be lots of fun and a very stimulating experience.

Personally I think that in the world of furniture less of distinction has yet been done than in certain other lines. Modern wall papers are wonderfully beautiful, the fertility of the designers in this field is nothing less than amazing. The metal workers have already added much to the sum total of world beauty, and so have the makers of glass and pottery. So taken in all, the modern movement is a very healthy youngster and promises to show us much in the next few years. Our business is to be sure that we are wide awake enough to see it.

No Small Home Should be Built without Space Saving Closets and K-V Fixtures!

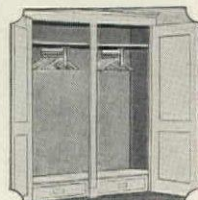
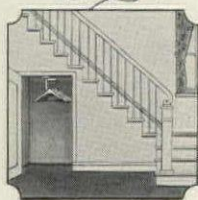
WITH the K-V Clothes Closet Fixture every garment hangs on an individual hanger. Selection of the garments is easy. Moths are discouraged, because the entire wardrobe comes out into the light and air of the room on the sliding, extension carrier every time a garment is wanted.

One thing that makes the K-V Fixture so suited to all homes is the many ways it can be installed. Even small,

cubby-holes, of no practical use become efficient garment cases.

Notice the methods of installation illustrated on the right. And apply them to the clothes closets in your present home or the home you may some day build.

Better still, write to us and receive the entire story, illustrated as presented in our informative booklet "The Clothes Closet and the Housewife."



Made in sizes from 12 to 60 inches to fit all closets in new homes or old.

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THE boiler to make heat, the radiators to put it in the rooms—the Balsam-Wool Blanket to *keep* it in.

There's a *modern* heating equipment—as good five or ten years from now as it is today.

After all, isn't it absurd to buy a good boiler, feed it expensive fuel and then let a third or more of the heat escape through the walls and roof?

Especially when you consider that Balsam-Wool permits the purchase of a smaller boiler and fewer or smaller radiators—saving all or at least a large part of its cost.

Isn't it just as absurd to go on year after year in an old home, using much more fuel than you need, when a Balsam-Wool Blanket in the attic will stop most of the loss?

Balsam-Wool is *flexible*. It tucks into every nook and cranny—seals every crack—as only a flexible material can.

Balsam-Wool is *thick*—a *full inch* is recommended. It stops heat as no thin insulation can. Balsam-Wool is not a substitute or "combination" material. It is made to accomplish just one thing—and does it.

Balsam-Wool is sold through established lumber dealers. You should know more about it. Send the coupon today for free sample and instructive free booklet.

WOOD CONVERSION COMPANY CLOQUET, MINNESOTA

Makers of Balsam-Wool, the Flexible Insulating Blanket. Also makers of Nur-Wood, the All Wood Insulating Wall Board and Lath.

Sales Offices in Principal Cities



Balsam-Wool is a guaranteed Weyerhaeuser product—a blanket of fluffy wood fibre that looks and acts like sheep's wool. It is **TRUE** Insulation—keeping the house warm in winter and cool in summer—because it is—

**FLEXIBLE-THICK
EFFICIENT
WINDPROOF
WATERPROOF
FIRE RESISTANT
VERMIN PROOF
LIGHT WEIGHT
PERMANENT**



WOOD CONVERSION COMPANY M-8-A
Dept. 86, Cloquet, Minn.

Gentlemen: Please send free sample of Balsam-Wool and booklet "House Comfort that Pays for Itself." I am interested in insulation for

☐ A new house ☐ The attic of my present one

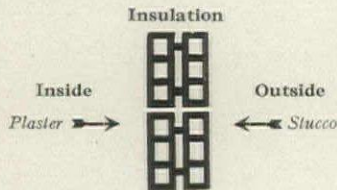
Name _____

Address _____

City _____ State _____

See Both Sides of the Wall Question

Tile walls and partitions will give many advantages of beauty, comfort, and economy to both the exterior and interior of your home, yet they will cost no more completed than if ordinary materials were used!



INSIDE

Plaster is applied direct to tile walls without the expense of lathing. If applied correctly it will not crack. Dark shadowy lines do not appear as when lath are used. Decorations on the smooth, solid surface of such walls can be made more beautiful. They will look "like new" much longer.

OUTSIDE

Stucco finishes stick tight to tile, because they and the tile expand and contract at practically the same rate under changing temperatures. Walls are permanently beautiful and fire-safe. Lower insurance rates. Practically no painting and up-keep expense. Tile walls increase the resale value of a home.

May we send you the illustrated circular, "How to Use Denison Load-Bearing Tile?" Many small-home builders have found it valuable as well as helpful. No obligation—just write—

Mason City Brick & Tile Co.

314 Denison Bldg.
Mason City, Iowa



SPECIFICATIONS SAVE YOUR DOLLARS

A COSTLY mistake some people make is to attempt to erect a home without a complete set of specifications. This is the easiest way to waste money in home building. No matter how small the home, a home builder cannot afford to take such chances unless he is prepared to pay more for it than he should. It is the specifications that take the guess out of building and save money.

It is not enough to have a set of plans. The reason specifications are used in home building is because they supplement the plans, taking up the building operations where the plans leave off. It is impossible to describe every detail of your home building operation on a set of plans, no matter how complete they may be. Plans give dimensions, sizes, etc., to be sure, but they do not describe the quality and grades of materials, methods of installation, types and kinds of equipment, all of which should be incorporated in a specification or written agreement with your contractor.

Complete specifications also provide an agreement between owner and contractor respecting insurance, liability, foreman supervision, bonds, liens, delays, and the like. They are therefore a protection to the home builder, since they insure that he will get what he pays for; and they are also a protection to the contractor against any unreasonable demands that the home builder may make of him. A specification is really an ironclad understanding, in specific terms, of what you want from your contractor and what he expects from you. Thus they work to the advantage of both home builder and contractor. High grade contractors, indeed, demand complete specifications, and home builders also should do so.

When an architect is employed to design a plan, he prepares the specifications in consultation with the owner. They are not only necessary in home building because of the detailed information they give, but essential to prevent discussions and controversies as the job proceeds. It is the lack of them that results in changes and "extras," that bane of architects, contractors, and home builders alike.

These things, changes and "extras," cost money. Therefore if you are interested in saving your home building dollars—and who isn't—be sure to provide yourself with a complete set of specifications before building.



is the ideal wood. Its indescribable beauty in marvelous transparent stains that enrich the attractive birch grain, wins the enthusiastic admiration of everyone. Available in many colors and tones—delicate orchid, light pastel green, royal blue, warm mellow browns, silver gray, dove gray, amber, rich rare ebony, natural or golden, and many others—these new finishes permit a different decorative scheme for each room, all equally lovely.

Wisconsin-Michigan birch used for interior trim, doors, floors and veneer paneled walls, is indeed an asset to any building. Nearly "mar-proof" hardness assures that your birch trimmed home will retain a fine appearance indefinitely.

For Furniture, too

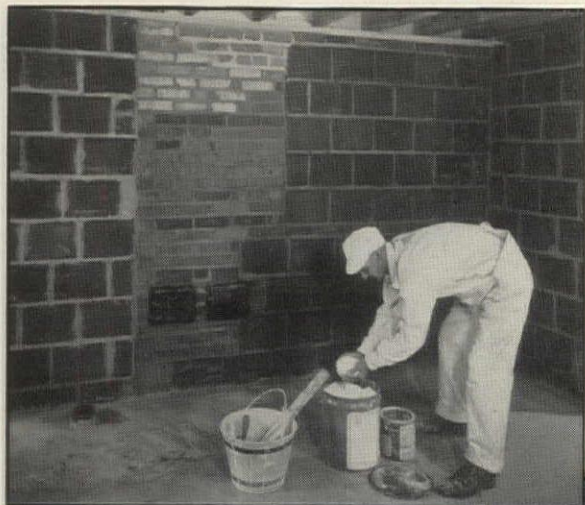
birch is a preferred cabinetwood. Today, birch furniture—in early period designs—is again the vogue with people of discerning taste and has attained new heights of deserved popularity that will be perpetuated by the sterling qualities of this premier northern cabinetwood.

GET BEAUTIFUL BROCHURE—FREE

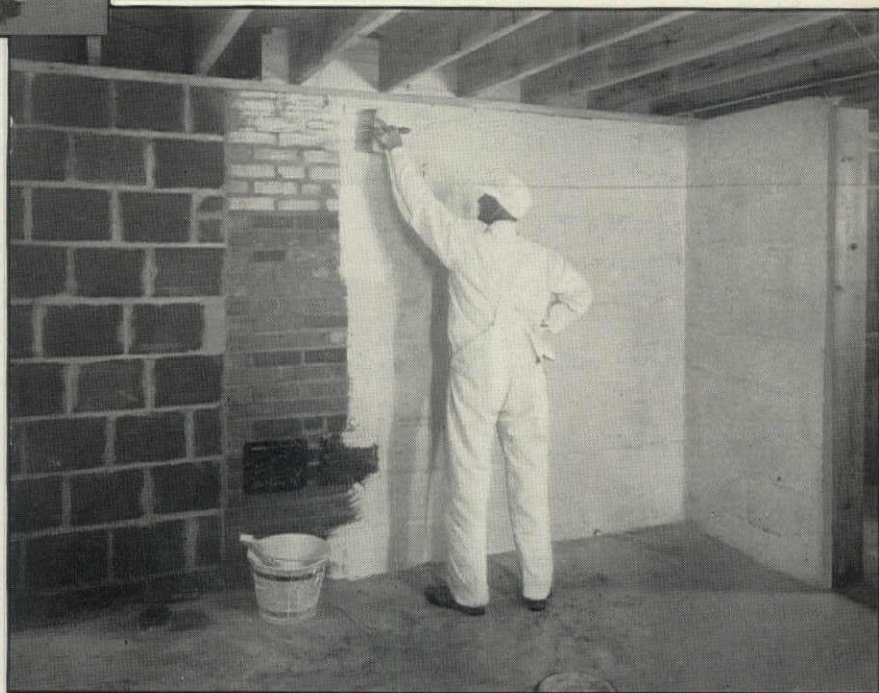
May we send you a complimentary copy of our new birch brochure? Contains much information of value and shows many fine interiors by eminent architects and decorators—several in colors.

THE BIRCH MFRS. ASSOCIATION
227 F. R. A. Building Oshkosh, Wis.

*Beautiful Birch
for Beautiful
Woodwork*



New Basements for Old



WET, damp basements are not necessary. They are mostly habits. They are endured because often times it is not known how very easy it is to make them damp proof, light and desirable.

Two coats of Medusa Cement Paint will transform a soggy base-

ment into liveable quarters that can be used for work or play.

Medusa Cement Paint is easy to apply and it is available in white, cream, green, stone gray, pearl gray and red. Full instructions for applying come with Medusa Portland Cement Paint. If your dealer cannot supply you, write us direct.

MEDUSA PORTLAND CEMENT COMPANY: 1002 The Engineers' Building, Cleveland, Ohio

Manufacturers of Medusa White Portland Cement (Plain and Waterproofed); Medusa Waterproofing (Powder or Paste); Medusa Gray Portland Cement (Plain and Waterproofed); Medusa Portland Cement Paint; and Medusa Mix Portland Cement Mortar.

MEDUSA

CEMENT PAINT

IT'S PATENTED



THE MEDUSA PORTLAND CEMENT CO.
1002 The Engineers' Building, Cleveland, Ohio

Send me free sample and information on the use of Medusa Portland Cement Paint.

Name.....

Address.....

City.....State.....

Outside dimensions (roughly) of basement are:

Length.....Width.....Height.....

Dealer.....

PANELLED WALLS OF WOOD FOR THE SMALL HOME

(Continued from page 17)

ing action of steam heat. As the exterior veneer is especially selected for its richness of grain, some charming effects are possible. Nearly all of our native woods are made up into these plywood boards, and they are quite reasonable in price. Indeed, not only is the cost low but it is a better type of construction than solid boards. Panels made from plywood will not warp or crack so easily.

From the earliest times, carpenters have realized that wood swells in moist weather and shrinks in dry weather and that nothing can prevent this action. This movement of wood is more pronounced across the grain than in its length. A wide board will shrink and swell in its width a good deal, but very little in its length. Knowing this, carpenters and cabinet makers have developed a method of building panels which has not changed much even in these days of new things. Narrow boards, two and three inches wide are used to build a frame for the panels

of wood. If a room is to be covered with panels, these framing boards, if horizontal are called rails and if vertical are called styles or muntins. Along their edges are cut grooves into which the edges of the panels can be fitted. Thus the panel boards were held in place but are free to shrink and swell.

In English panelling the rails and muntins were made about two and three quarters of an inch wide. The edges were cut with a rebate so that the panels slipped behind them. In cross section they were something like a T with a very wide stem and narrow cross bar. Some rails, however were made like an H in cross section and the edges of the panels were fitted into the slots.

The proportions of the panels were quite well established. The width was to the height as 3 is to 5. Usual dimensions in inches were 12" wide and 20" high. The horizontal rails were usually continuous strips and the muntins were cut into short lengths and fitted in between the rails. Mould-



Beyond the Sewer Line

~ *San-Equip*

A modern toilet—an up-to-date bathroom with the latest conveniences—safe sewage disposal that protects your health. These are the things which will modernize your country or suburban home and bring you new living comforts. They are all made possible when you install the new improved

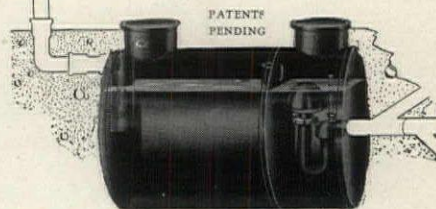
San-Equip

Siphon System

This San-Equip system represents the latest improvement in septic design and construction. The septic process and siphon discharge are combined in a single compact unit—perfect operation is assured. Intermittent drainage of the effluent to the filter bed allows intervals of rest which improve the condition of the absorption field and reduce the liability of overloading or clogging. Complete details, prices and plan sheets gladly sent on request. Write today.

Chemical Toilet Corporation
891 E. Brighton Ave., Syracuse, N. Y.

Makers also of San-Equip
Self-Drain Waterless Toilets



GARAGE PLANS

THE Architects' Small House Service Bureau has extended its plan service to garages. It has designed fourteen garages to go with various types of small home architecture, in different materials. Seven of these are of single car garages and seven of double car garages. The single car garage plans are sold for \$5.00; double car garage plans for \$7.50. Write for descriptive folder telling about the fourteen garage plans, that the Bureau has ready to use.

\$79⁵⁰
COMPLETELY
INSTALLED
**to TILE THIS
BATH ROOM**

The 6 ft. x 8 ft. bathroom shown above was completely tiled with Chromite for \$79.50. That includes the cost of material and installation. Imagine!—\$79.50 for a completely tiled bathroom. That's less than one-third the cost of ordinary tile installed. Chromite is hung on the wall like wall paper. No confusion, no tearing up walls, no fuss. Let us figure what it would cost to Chromite your bathroom or kitchen.

Attractive territorial arrangements open for a few additional distributors.

CHROMITE COMPANY
223 N. La Salle St., Chicago

Please send estimate, without obligation for complete installation of Chromite for a kitchen or Bathroom of the following dimensions:

Width _____ feet—Open wall space for
Height _____ feet—Windows _____ sq. ft.
Length _____ feet—Bathtub _____ sq. ft.
Doors _____ sq. ft.

Name _____
Address _____

City _____ State _____

☐ Send illustrated circular showing installations of Chromite.



Chromite offers renewed richness, brilliance and enduring charm for your kitchen, bathroom and hall walls. Do you desire a particular color harmony? You are certain to achieve it with Chromite. There's a wide range of colors to choose from—soft delicate pastels, bold colorings and variegated treatments. Chromite is absolutely waterproof and non-absorbent. Made of rust-proof zinc. Washes easily with soap and water. The glossy flint-hard surface is permanent. Chromite saves you many times its cost because its enduring beauty eliminates the expense of future decoration.

Mail Coupon for Estimate

Without obligation, let us tell you exactly how much it would cost for complete installation of Chromite in your kitchen or bathroom. Transform your bathroom, kitchen and halls through the magic of Chromite. Give it new charm, new character. Fill in the coupon now—giving dimensions.

CHROMITE COMPANY
223 N. La Salle St., Chicago

CHROMITE
For Walls of Enduring Beauty

ings were cut along the edges of the muntins, and a moulding added at the top of the panel under the rail to match and miter at the corners. No moulding was carried along the bottom of the panel, but the upper edge of the rail was chamfered. The panel itself was about one inch thick and decorated with carving. The design which was most in vogue was the so called linen-fold.

Now to build panelling of this type today is a cabinet makers job and the cost is rather great. However, there is a way of constructing it so that it has much the same character, but is very much less difficult to build, and is therefore more in keeping with the economies which must be practiced in the small house.

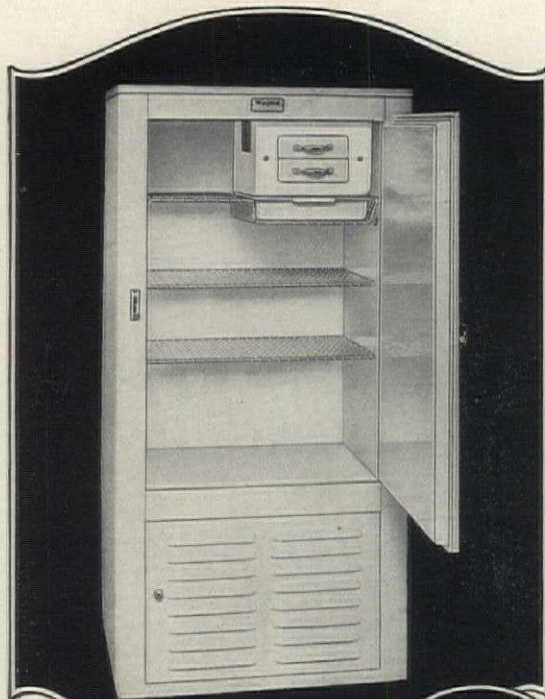
This is the way to do it. First cover the studding with gypsum boards or lath and one coat of rough plaster to serve as a fire stop behind the wood panelling. The position of the various muntins and rails in relation to the openings in the room must, of course, be laid off in a drawing. To maintain good character, the size of the panels should be as near to 12" wide to 20" high as possible.

Use plywood, veneered on one side with oak, in lengths which will go roughly from floor to ceiling. Paint the back with linseed oil before setting in place to retard the penetration of dampness. Nail all joints in a position where they will be behind rails or muntins. This of course is also true of the position of nail heads. On top of the walls thus sheathed with plywood, nail the horizontal rails, consisting of plain oak boards $2\frac{1}{4}$ " wide by $\frac{3}{4}$ " thick. The short lengths of vertical muntins can also be nailed on. Then apply along the edges of the rails and muntins, mitering at the corners, an oak moulding having the right character of profile.

It is best not to nail these mouldings or rails too firmly together for the first year, for as the house settles, some stresses will be set up in this panelling, and if free to move a little, the wood will not split. After the first year, more nails can be driven in. Counter sink these nails where they show and fill up the holes with plastic wood compound.

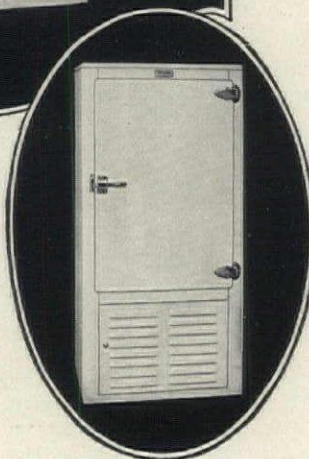
The effect of wood panelling of this type is very pleasing, besides being very much cheaper to build than real panelling. If it is stained slightly, and the middle of the panels rubbed with steel wool to lighten up the stain and add a high-light and then wax applied, a very rich room decoration will result.

An even less expensive panelled effect can be secured by using plywood of Douglas fir and styles of the same wood.



The Aristocrat of Electric Refrigerators- *In Colors!*

COLORS—gay—smart—scintillating—that harmonize with the color schemes of modern kitchens—are found in each of the new models of Wayne Electric Refrigerators! But their unusual beauty is only part of the story—to it is added the manner in which these sturdy and efficiently constructed refrigerators keep vegetables, meats, milk, etc.—“always at their best.”



Pictured here is Model No. 500, an economical efficient refrigerator—sold at a comparatively low price! Ideal for small homes and apartments!

Wayne dealers, everywhere, are now displaying a size for every family and a color for every kitchen! Sold on Convenient Terms, if desired! Let us tell you the name of your nearest Wayne Dealer! No obligation!

Wayne

Made By The
WAYNE HOME EQUIPMENT CO.

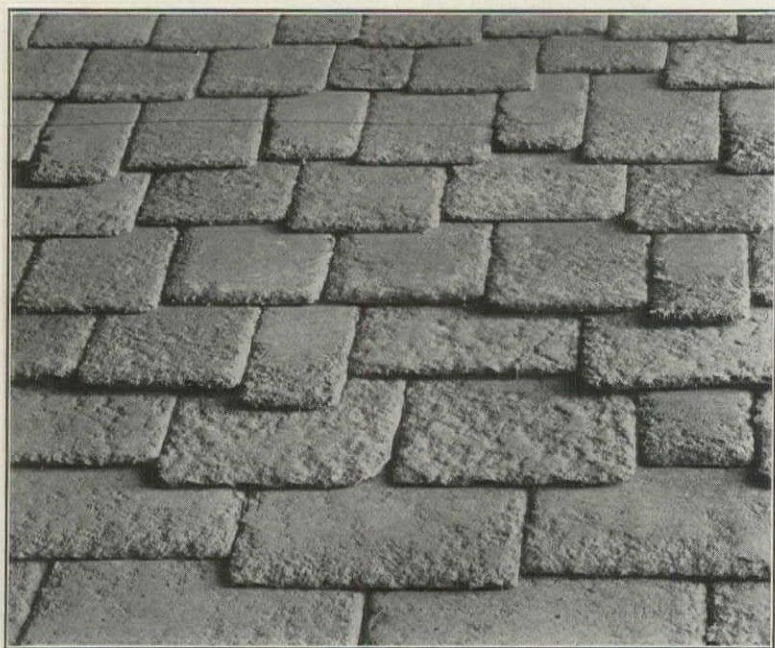
Main Office, Fort Wayne, Ind.
New York Office, 1780 Broadway.

The graining of the fir is very beautiful for the veneers are taken from the out layer of the tree and since the logs are so great, and the cut is almost parallel to the annual ring of the new growth all the irregularities of the new growth produce a curling, twisting grain of great interest. This wood panelling will look best if no stain is applied. A stain will accentuate the grain so much that it will give the room a restless feeling. The unstained wood, finished with a little wax, in which burnt umber has been added, will be quieter and more

cheerful. As the general tone is amber color, the room will not be as dark and heavy as one panelled with oak.

For a living room 13'x22' and 8' high, the materials for panelling of this type cost about \$85. The labor of applying will be about as much again. The same panelling done in the real manner would cost in the neighborhood of \$1000. I can recommend the effect, for I have tried it out on myself, in my own home, and I am still happy to live with it, and know that I could never have afforded a real panel job.

SAFE *from* Fire AMBLER Repair ASBESTOS Fading SHINGLES Decay



Attractive, Colorful and Enduring

All the elements necessary for a perfect roof are included in Ambler Asbestos Shingles.

No danger from flying embers; no need to repair or reroof during your life-time—and with this protection is included a colorful, artistic covering.

There are many choices available, making it easy to select a type and color best suited to your home.

Important!

Do not confuse Ambler Rigid Asbestos Shingles with many types of flexible roofing on the market. Ambler Shingles will not curl, rot or burn. They are rated "Class A" by the Underwriters' Laboratories, which means full protection and insurance saving.

*It will cost you nothing
 for an estimate if you
 plan to build this year.
 Write for details.*

**ASBESTOS
 SHINGLE, SLATE & SHEATHING
 COMPANY**

AMBLER, PENNA.

ST. LOUIS, MO.

THE OIL HEATER IN THE ASCENDENCY

(Continued from page 26)

temperature would shut off the burner in the normal way and prevent a flood of oil in the furnace. The control will also operate to prevent trouble in case the ignition will not work when the burner is turned on.

Disadvantages of an improperly controlled heating apparatus are easily imagined. If the flame is not turned off in time the steam in a steam plant will all be blown out through the safety valve, filling the basement with steam and emptying the tank of water, so that it will burn out, as a tea-kettle or double-boiler might. The hot water tank will also be blown empty of water through its safety device, and it in turn will burn out.

It is not claimed that these are common occurrences, but Professor Rowley does believe that adequate automatic regulation is an absolute necessity in the successful and trouble-less operation of an oil burner. Unnecessary fuel consumption is a constantly attendant evil if the automatic control is unsatisfactory.

Asked if there were anything about an oil burning apparatus that made it objectionable in a small house by comparison with a large, Mr. Rowley said that no such disadvantage had ever come to his attention, provided of course, that the burner installed in the small home were proportionate in size to the home it was to heat. Oversize installations would tend to burn too much fuel and would keep the home uncomfortably warm.

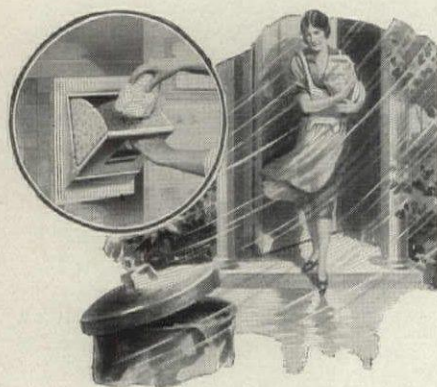
The greatest advantage of the oil burner, in his opinion, lies in all periods of mild weather during which, nevertheless, it is cold enough to require that the home be heated. Under proper regulation the oil burner gives a more equable heat at these periods, besides saving materially on the fuel bill. When autumn is cold, or when spring is cool and prolonged, the oil equipment has marked superiorities over the coal type heating plant. By the time a coal furnace has been worked up to a heat that will keep it going all day and warm the living rooms, it has attained a momentum that will make it consume more fuel than necessary and probably heat the house above a desirable temperature. This is all the more true because the thermostatic control does not act immediately after the furnace reaches the proper heat, but must await the "lag" that intervenes before

this heat is disseminated through the upstairs rooms.

This is a tendency that is more pronounced the more readily a fuel burns. It is present even with anthracite coal. With swifter burning soft coals, which reach high furnace heats more quickly, there is less opportunity for the upstairs to become warm in time to check the furnace promptly. With oil burners, which are the swiftest heating of all, this likelihood is most pronounced. But, and here is the big point in their favor, if they are properly regulated, they shut off the furnace heat immediately, something that can not be done with a coal burner of any type. The coal burner must not only continue to burn, but must be fed again, sometimes even when it is too hot, in order that it may be kept going throughout the rest of the day. No oil burner ever has to be fed for the sake of keeping it going.

According to the authority of the Minnesota engineer, an oil burner is at least 20 per cent more efficient in consuming the fuel fed into it than is a

(Continued on page 44)



Which will you have in your new home?

The foul smelling, germ breeding, inconvenient garbage can is a nuisance that has no place in the modern home. Contrast this to the wonderful convenience and sanitation of the **Chimney-Fed Kernerator**. Into the handy hopper door, shown above, is dropped not only garbage but papers, bottles, tin cans and trash of all kinds which fall to a brick combustion chamber in the basement where the daily waste accumulates for an occasional lighting. A match does it. No fuel required—the discarded combustible waste is the only fuel needed. The Basement-Fed Kernerator for your home already built costs about the same as the portable gas fired incinerator of half the capacity. The saving in gas pays for it in a few years' time.

Send for booklet, "The Sanitary Elimination of Garbage and Household Waste."

KERNER INCINERATOR COMPANY
720 East Water St. - Milwaukee, Wisconsin

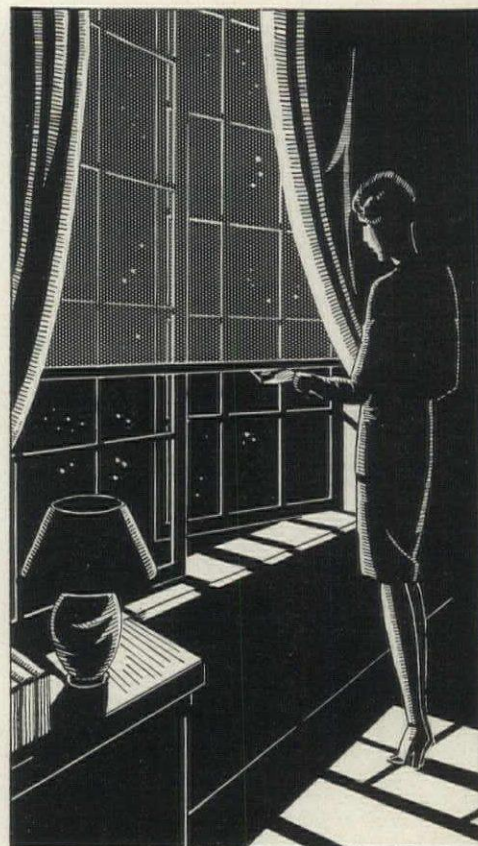
KERNERATOR

REG. U.S. PAT. OFF.
[Garbage and Waste Disposal]
for New and Existing Homes

Rolscreens

TRADE MARK

Window Screens Modernized!



ROLSCREENS are as different from the window screens of yesterday as are your convenient homes of today..

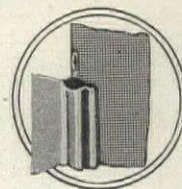
ROLSCREENS have attained a beauty and convenience never before thought of in connection with window screens.

Rolscreens are scarcely visible. There are no unsightly frames to mar the beauty of the windows. They are all metal construction and are built in with the windows. Rolscreens roll up and down—up, they are completely hidden and a touch lowers them, automatically locking firmly into place on the inside.

Of course, Rolscreens save the labor and expense of taking down and rehanging each season but home owners have discovered many new conveniences in having Rolscreens always ready for service the entire year.

ROLSCREEN COMPANY

267 Main Street, Pella, Iowa



A section through guide showing lug in seldge of screen wire which prevents screen from sagging. A "non-sagging" feature found only in Rolscreens.



A LITTLE HOUSE FOR LITTLE FAMILIES

(Continued from page 23)

might—I'm only insinuating—want to put certain of your wedding presents.

Having saved the best until the last, I can't wait any longer to talk about the living room. Will you notice that bay window? What a glorious place to put a dining table when you're entertaining some one very special. The fireplace, however, is my particular joy. That hearth is over eight feet long. How I envy you your glorious winter

evenings in front of it. There is also a closet bed that turns down into this room. I never would have recommended a house that couldn't take care of an occasional guest; i. e., me.

Last of all, there's a basement under the entire house. A kind of 50-50 proposition that; the laundry and fruit closet for you, the fuel and heater rooms for Jerry. The house, also, is of frame with stucco finish and a shingle roof.

For New Homes and Old **HERRICK** Outside Icing

WHETHER you are planning to build this summer or simply make a few improvements in your old home, you should include HERRICK Outside Icing in your plans.

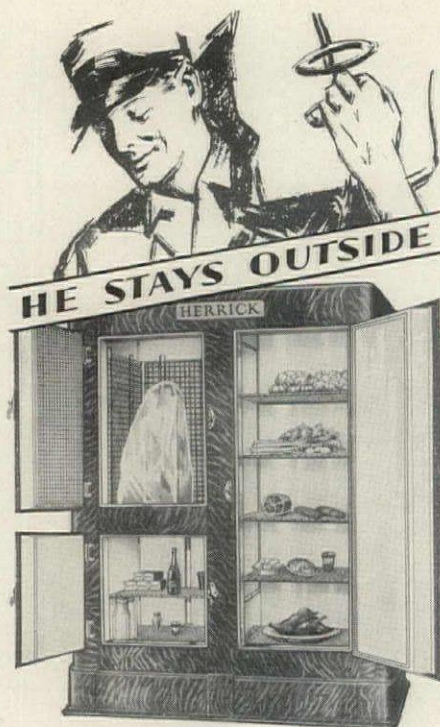
Saves Time and Trouble

With HERRICK Outside Icing, your refrigerator is always kept well iced without the slightest bit of responsibility to you. Since the refrigerator is filled from the outside, you never have to "wait at home until the iceman comes." Never does the ice have to be brought through your kitchen. HERRICK Outside Icing can be used with any HERRICK Refrigerator.



Other Advantages of a HERRICK

The HERRICK REFRIGERATOR may be used with either ice or electricity, which-



ever you prefer. Triplex Insulation insures the greatest efficiency from every pound of ice or watt of electricity used. Forced Cold Air Circulation keeps the interior of the refrigerator constantly sweet and purified.



HERRICK Water Cooler

gives pure, ice-cold water, untouched by ice, at the turn of a faucet. For city, spring, or well water.

FREE FOLDER—Write for "Outside Icing Blue Print Plans." Address Herrick Refrigerator Co., 1105 River St., Waterloo, Iowa.

HERRICK

THE ARISTOCRAT OF REFRIGERATORS

THE OIL HEATER IN THE ASCENDENCY

(Continued from page 43)

coal furnace. It is doubtful if the latter ever reaches a 50 per cent efficiency in fuel combustion. A far greater percentage of its total heat production is wasted up the flue. The average ash from burnt coal contains a large percentage of coal. An excellent example of this is found in the fact that the city of Milwaukee burns its garbage in the city incinerator by burning the ashes

collected from the homes and office buildings of that city. Once the fire in the incinerator is well under way the ashes are found to contain ample coal to keep them going nicely.

Professor Rowley finds that there is no more danger of "roar" from an oil burner in a small home than in a large. No matter what the size of the house, a burner that roars can be heard through-

out the first floor rooms at least. Roaring however, he has found to be due to faulty construction in certain types of oil burners, and he would apply the very simple remedy of purchasing one of a type that does not roar. The roar comes either from the adjustment of the forced draft or from the atomizing apparatus. While this trouble was often encountered in the early period of oil burner construction it has been eliminated from many of the better burners put on the market today and careful inquiry should enable any home builder or owner to obtain an oil burner that will operate noiselessly.

Oil burners are built in two general styles of construction, the blower type, and the gravity or natural draft type. The blower type, usually including a fuel atomizer, is the more expensive, ranging from \$400 to \$1,000. The gravity type, he has found, could be installed for relatively moderate prices were it not for the additional cost of installation and of tanks for fuel.

In operating the blower type the draft can be artificially regulated to good effect, but the gravity type is affected by the weather, having a strong draft, just as a furnace has, in cold weather, and a materially weaker draft when the weather is mild. As a result of the changing draft as the weather changes this type sometimes suffers in the effectiveness of its combustion. Scientists recommend setting such a burner so as to give off the highest possible percentage of carbon dioxide, which is a result of thorough combustion. When the draft drops off and too little of the carbon combines with the oxygen in the air, a formation of carbon takes place in the burner and furnace, which smuts the apparatus and cuts its effectiveness. If, on the other hand, the burner is set so as to give too much air in the burning mixture, low carbon dioxide results and too much of the gas which should burn is lost through the stack.

For fuel storage, the main tank, when one is used, should be sunk in the yard outside the house. The tank from which the oil flows into the burner may either stand on the basement floor or be sunk under the floor. As a 50 gallon tank, no larger than a barrel, usually serves this purpose, it makes relatively little difference whether it is on the basement floor or under it, although there is probably a greater element of safety when it has been sunk.

Pertinent to all heating problems, according to this authority, is this fact—that the more one saves of the heat generated in the furnace of any type, the less need be the demand on the heating equipment. When a small house



This interesting pattern results when Winthrops are laid by our Staput method and this method of application makes the tightest roof we know of.



Winthrops Weather-Seal Low Pitched Roofs

THE extremely low pitched roof on this house in Park Avenue, River Forest, Illinois, is satisfactorily covered with Winthrop Tapered Asphalt Shingles. These thick-butted shingles and the method of laying them have resulted in a weather-sealed roof that will last many years and remain beautiful.

The thick butts lie close and flat. They double the thickness where exposure to weather comes. The colors are the natural colors of the slate that is crushed and firmly embedded in the everlasting asphalt which is extra thick over

the heavy felt cores. On this red brick house the Greenfield Blend was used—sea green, mist green, silver blue and mist blue. For any house in any surroundings there is the perfect color or blend, among the twenty Winthrop colors.

The method of laying that is illustrated here is the Staput, developed by our own men to produce the tightest possible roof. It's a method also that accents the shadow lines of the thick butts.

Winthrop Tapered Asphalt Shingles

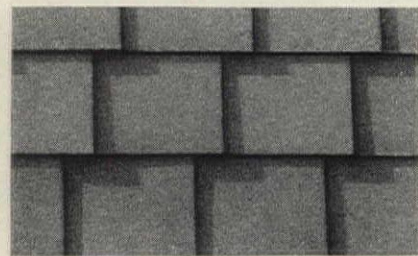
Bulletin A-19

Most good lumber dealers carry Winthrops, but we would like to send you illustrated literature. Ask for Bulletin A-19 and mention, please, if you would like a sample of Argotex Building Felt, noted for its insulating value.

BECKMAN-DAWSON ROOFING COMPANY

223 W. Jackson Blvd. CHICAGO, ILL.

Factories at Chicago, Detroit and Lockport, N. Y.



is so constructed that heat losses are diminished, less fuel need be burned, operation of the heating plant will be less expensive, and better satisfaction will result in general. This is especially advantageous when an oil burner is used because of the ease with which it can be turned off, once the house is warm enough. This is something that cannot be done with coal, which can merely be checked, but not put out.

To effect a satisfactory heat saving and loss prevention, he advises the prospective small house owner to put at least half an inch, preferably a full inch, of some effective insulating material in all outside walls. This, he

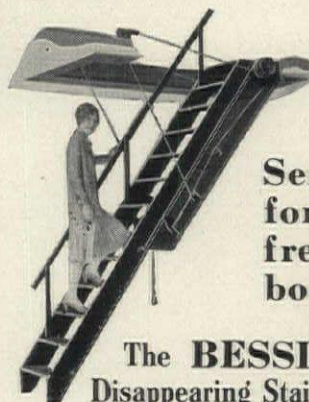
guarantees, will far more than pay for itself as the years pass, each with its impressive fuel bill. Furthermore, each of those years will bring less trouble, greater comfort, and far more satisfaction with his fuel plant to the home owner whose house is satisfactorily insulated than it possibly can to the man and woman who own a carelessly constructed home.

So the story of oil burners can be ended with about the same thought with which it was begun. The oil burner is just as effective in the small home as in the large, and—"most people who have used an oil burner are unwilling to go back to coal."

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Of What Are Houses Made?

The Booklets and Pamphlets below describe in an interesting helpful way materials, equipment, and furnishings that you will want to consider for your home. They will be sent for the asking.

Building Materials

BRICK

- A New House for the Old
American Face Brick Asso. 51
- What's In a Wall
Common Brick Manufacturers' Asso. 52
- Beauty in Brick
Finzer Bros. Clay Co. 53

STONE

- The Common Sense of Ashtone
Bloomington Limestone Co. 65

BUILDING TILE

- Denison Matt Faced Tile Construction
Mason City Brick & Tile Co. 70
- Literature Describing Structural Clay Tile
Structural Clay Tile Asso. 75
- Tex-Tile Home Plans
National Fireproofing Co. 71

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- Firesafe Homes (Concrete Masonry)
Portland Cement Association 80

CEMENT

- Medusa Waterproof Portland Cement
Sandusky Cement Co. 85

LUMBER

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California Redwood Association 90
- Grade Marked Lumber
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- Packaged Lumber
Weyerhaeuser Forest Products 91

SHINGLES

- Stained Shingles for Walls and Roof
Samuel Cabot, Inc. 101
- Copper or Copper Clad
Copper and Brass Research Asso. 102

CASEMENTS AND STEEL BASEMENT WINDOWS

- Truscon Standard Casements
Truscon Steel Company 166
- Genfire Casements
Genfire Steel Company 167

FLOORING

- Beautiful Birch
The Birch Manufacturers 110
- Colonial Distinction in Plank Floors (Oak)
E. L. Bruce 111
- The New Color Enchantment in Hard Maple Floors
The Maple Flooring Manufacturers Asso. 112
- Beautiful American Gumwood
The Charm of the Sovereign Wood
Hardwood Manufacturers' Institute 113

HARDWOOD FOR FLOORS, PANELLING, OR FURNITURE

- Beautiful American Gumwood
The Charm of the Sovereign Wood
Hardwood Manufacturers' Institute 113
- Beautiful Birch
The Birch Manufacturers 110

INSULATION

- Build Warm Houses
Samuel Cabot, Inc. 120
- Rooms of Happiness
Increasing Home Enjoyment
The Insulite Company 121
- House Comfort that Pays for Itself
Wood Conversion Co. 122

METAL LATH

- Herringbone Doublemesh Metal Lath
Genfire Steel Company 130
- Modern Modes in Better Plastering
The Milwaukee Corrugating Co. 131

MILLWORK

- How to Make Your New Home More Comfortable (window frames)
Andersen Lumber Co. 141
- Interior and Exterior Woodwork
The Curtis Companies 142
- Laminex Doors
The Wheeler Osgood Co. 143
- Modern Home Interiors
National Lumber Manufacturers Asso. 144

STAINS, VARNISHES, PAINTS AND ENAMELS

- Suggestions for Color Combinations
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- Cabot's Collophanes and Creosote Shingle Stains
Samuel Cabot, Inc. 146

ROOFING

- It's Only as Good as Its Roof
Asbestos Shingle, Slate & Sheathing Co. 159
- Cabot's Stained Shingles and Creosote Shingle Stain
Samuel Cabot, Inc. 153
- Copper, Copper Shingles, Copper-clad Shingles, Spanish Tile
Copper and Brass Research 151
- Winthrop Tapered Asphalt Shingles
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- Pamphlet B
Bangor Slate Asso. 157
- Pamphlet XX
Vendor Slate Co. 156
- Weatherproof Roofs of Distinction (metal tile)
Wheeling Corrugating Co. 155
- Defying Age and Time (metal tile and shingles)
Wheeling Metal Mfg. Co. 154

WATERPROOFING

- Medusa Waterproofing (powder or paste)
The Sandusky Cement Co. 135
- Waterproofings and Concrete Preservatives
Genfire Steel Company 136

TILE FINISHES FOR BATHROOMS AND KITCHENS

- Attractive Illustrated Circulars
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- Design and Construction of Modern Fireplaces
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- Catalogue of Helpful Fireplace Information
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HEATING EQUIPMENT

- The Witching House
Burnham Boiler Corp. 173
- Warm Air Furnace Heating
Hess Warming & Ventilating Co. 171

(Continued on following page)

Coupon

Service Editor,
THE SMALL HOME,
1200 2nd Ave. So.,
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Please send me the following booklets as listed in your May 1929 issue. (Order by number.)

Also secure for me free descriptive literature on the following subjects:

Name.....

Address.....

Reducing the Family Fuel Budget <i>Newport Boiler Company</i>	175
Which Heating Plant for My Home (hot water pressure system) <i>H. A. Thrush & Co.</i>	172
Heating and Plumbing Products <i>Smyth-Despard Co.</i>	174
Wayne Oil Burner <i>Wayne Home Equipment Co.</i>	177
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How to Landscape the Home Grounds <i>Storrs & Harrison Co.</i>	303
Trees, Shrubs, Plants, Seeds <i>Storrs & Harrison Co.</i>	304

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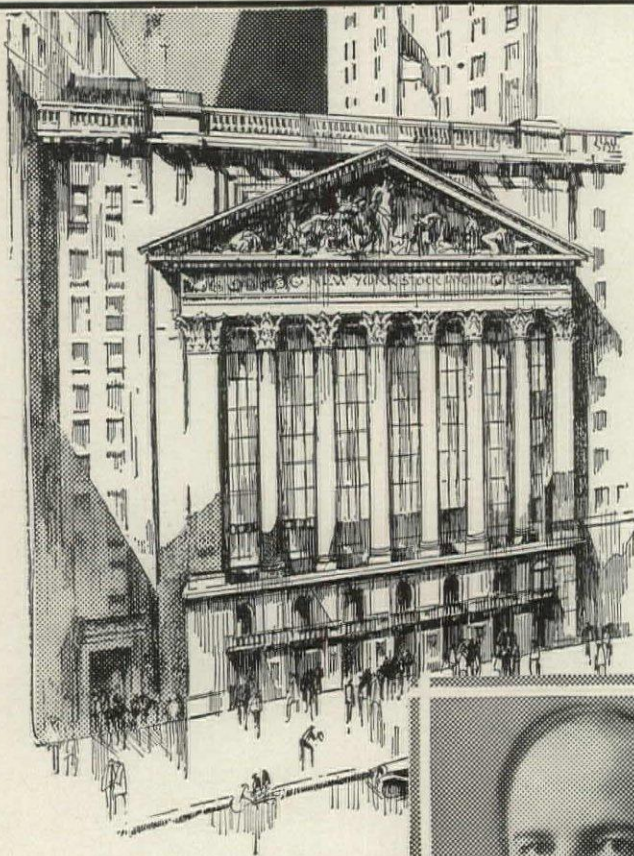
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NATIONAL HEADQUARTERS

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TO THE OWNERS OF AMERICA'S HOMES FROM THE DESIGNERS OF AMERICA'S SKYLINE



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COPPER, BRASS, BRONZE — The World's Most Useful Metals

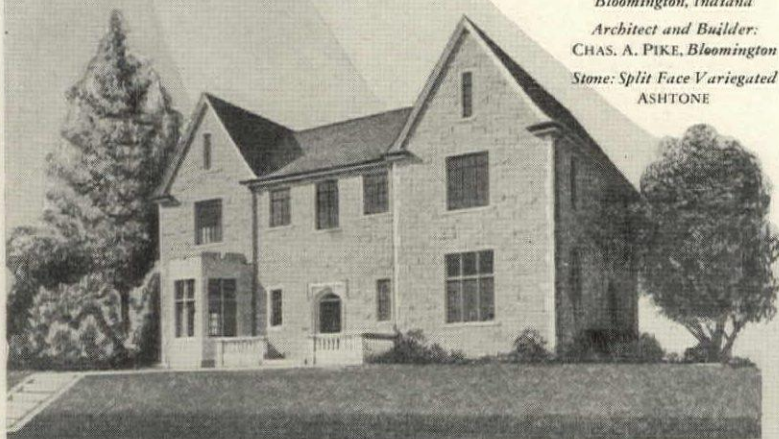
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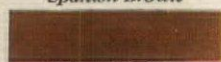
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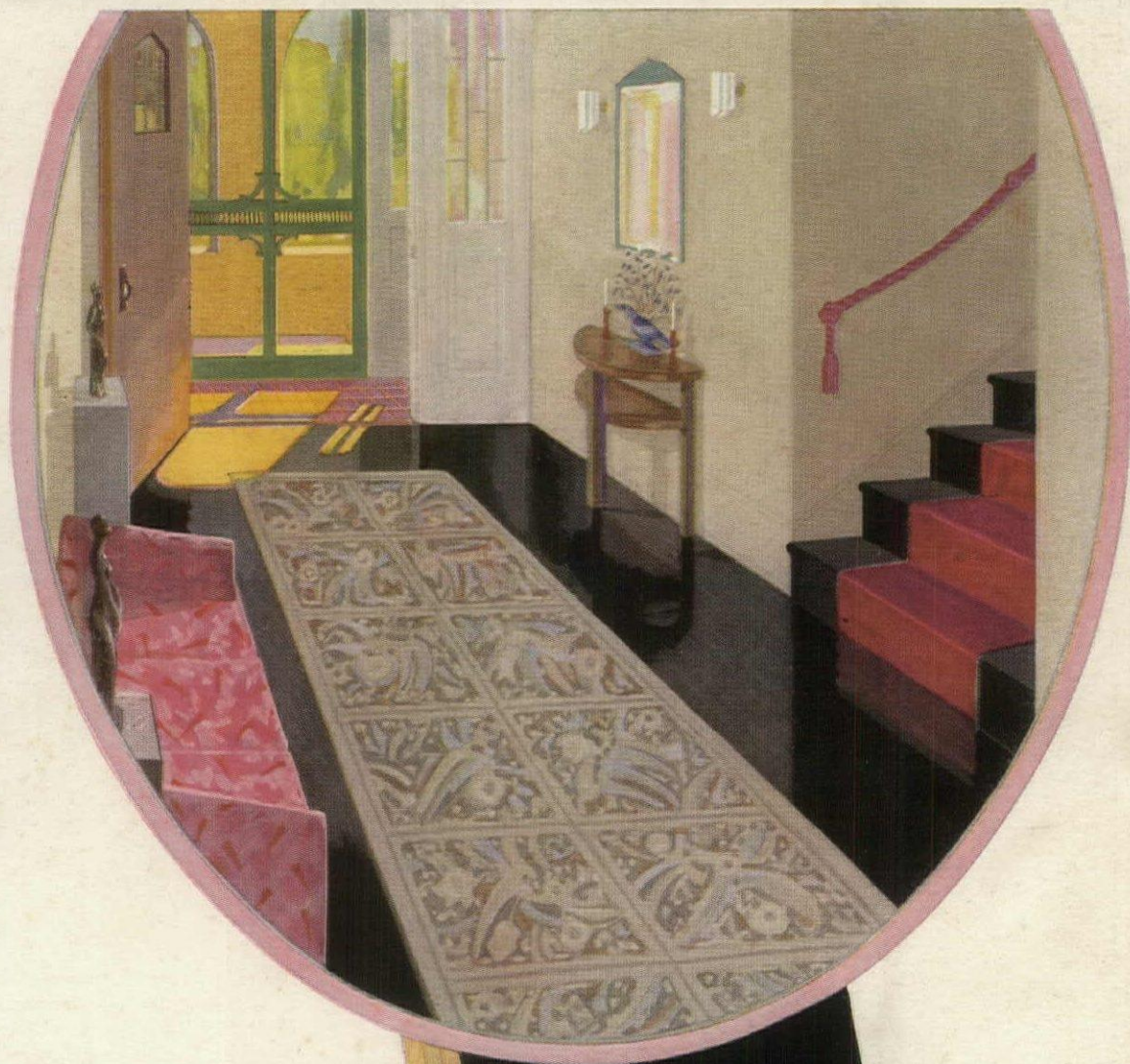
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